#define DECODER\_BITS 5

#define LEDS\_PER\_ROW 5

#define pEN 12

#define MICRO 25

#define p0 4

#define p1 3

#define p2 2

#define p3 6

#define p4 5

#define Z0 7

#define Z1 8

#define Z2 9

#define Z3 10

#define Z4 11

unsigned int decoderPins[] = {p0, p1, p2, p3, p4};

unsigned int cathodePins[] = {Z0, Z1, Z2, Z3, Z4};

//individual LEDS

void LED1() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void LED2() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void LED3() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void LED4() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void LED5() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void LED6() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, LOW);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void LED7() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void LED8() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void LED9() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void LED10() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void LED11() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, LOW);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void LED12() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, LOW);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void LED13() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void LED14() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, LOW);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void LED15() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, LOW);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void LED16() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void LED17() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void LED18() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void LED19() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void LED20() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void LED21() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void LED22() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, LOW);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void LED23() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void LED24() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void LED25() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, HIGH);

}

void LED26() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void LED27() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void LED28() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void LED29() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void LED30() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void LED31() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, LOW);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void LED32() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void LED33() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void LED34() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void LED35() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void LED36() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, LOW);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void LED37() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, LOW);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void LED38() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void LED39() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, LOW);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void LED40() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void LED41() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void LED42() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void LED43() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void LED44() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void LED45() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void LED46() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void LED47() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, LOW);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void LED48() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void LED49() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void LED50() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, HIGH);

}

void LED51() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void LED52() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void LED53() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void LED54() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void LED55() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void LED56() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, LOW);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void LED57() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void LED58() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void LED59() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void LED60() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void LED61() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, LOW);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void LED62() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, LOW);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void LED63() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void LED64() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, LOW);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void LED65() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void LED66() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void LED67() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void LED68() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void LED69() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void LED70() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void LED71() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void LED72() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, LOW);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void LED73() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void LED74() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void LED75() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, HIGH);

}

void LED76() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void LED77() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void LED78() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void LED79() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void LED80() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void LED81() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, LOW);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void LED82() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void LED83() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void LED84() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void LED85() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void LED86() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, LOW);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void LED87() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, LOW);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void LED88() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void LED89() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, LOW);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void LED90() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void LED91() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void LED92() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void LED93() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void LED94() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void LED95() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void LED96() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void LED97() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, LOW);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void LED98() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void LED99() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void LED100() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, HIGH);

}

void LED101() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void LED102() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void LED103() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, LOW);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void LED104() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void LED105() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void LED106() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, LOW);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void LED107() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, LOW);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void LED108() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void LED109() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void LED110() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void LED111() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, LOW);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, LOW);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void LED112() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, LOW);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void LED113() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void LED114() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, LOW);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void LED115() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, LOW);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void LED116() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void LED117() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void LED118() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void LED119() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, LOW);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void LED120() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void LED121() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void LED122() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, LOW);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void LED123() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, LOW);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void LED124() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void LED125() {

 digitalWrite(Z0, LOW);

 digitalWrite(Z1, LOW);

 digitalWrite(Z2, LOW);

 digitalWrite(Z3, LOW);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, HIGH);

}

//COLUMNS

void COL1() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void COL2() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void COL3() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, LOW);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void COL4() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void COL5() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void COL6() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, LOW);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void COL7() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, LOW);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void COL8() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

}

void COL9() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void COL10() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void COL11() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, LOW);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, LOW);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void COL12() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, LOW);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void COL13() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void COL14() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, LOW);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void COL15() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, LOW);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, LOW);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void COL16() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

}

void COL17() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void COL18() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void COL19() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, LOW);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void COL20() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void COL21() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void COL22() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, LOW);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void COL23() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, LOW);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void COL24() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

}

void COL25() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, HIGH);

}

//LAYERS

void LEVELA(){

LED1();

delay(5);

LED2();

delay(5);

LED3();

delay(5);

LED4();

delay(5);

LED5();

delay(5);

LED6();

delay(5);

LED7();

delay(5);

LED8();

delay(5);

LED9();

delay(5);

LED10();

delay(5);

LED11();

delay(5);

LED12();

delay(5);

LED13();

delay(5);

LED14();

delay(5);

LED15();

delay(5);

LED16();

delay(5);

LED17();

delay(5);

LED18();

delay(5);

LED19();

delay(5);

LED20();

delay(5);

LED21();

delay(5);

LED22();

delay(5);

LED23();

delay(5);

LED24();

delay(5);

LED25();

delay(5);

}

void LEVELB(){

 LED26();

 delay(5);

 LED27();

 delay(5);

 LED28();

 delay(5);

 LED29();

 delay(5);

 LED25();

 delay(5);

 LED31();

 delay(5);

 LED32();

 delay(5);

 LED33();

 delay(5);

 LED34();

 delay(5);

 LED35();

 delay(5);

 LED36();

 delay(5);

 LED37();

 delay(5);

 LED38();

 delay(5);

 LED39();

 delay(5);

 LED40();

 delay(5);

 LED41();

 delay(5);

 LED42();

 delay(5);

 LED43();

 delay(5);

 LED44();

 delay(5);

 LED45();

 delay(5);

 LED46();

 delay(5);

 LED47();

 delay(5);

 LED48();

 delay(5);

 LED49();

 delay(5);

 LED50();

 delay(5);

}

void LEVELC(){

 LED51();

 delay(5);

 LED52();

 delay(5);

 LED53();

 delay(5);

 LED54();

 delay(5);

 LED55();

 delay(5);

 LED56();

 delay(5);

 LED57();

 delay(5);

 LED58();

 delay(5);

 LED59();

 delay(5);

 LED60();

 delay(5);

 LED61();

 delay(5);

 LED62();

 delay(5);

 LED63();

 delay(5);

 LED64();

 delay(5);

 LED65();

 delay(5);

 LED66();

 delay(5);

 LED67();

 delay(5);

 LED68();

 delay(5);

 LED69();

 delay(5);

 LED70();

 delay(5);

 LED71();

 delay(5);

 LED72();

 delay(5);

 LED73();

 delay(5);

 LED74();

 delay(5);

 LED75();

 delay(5);

}

void LEVELD(){

 LED76();

 delay(5);

 LED77();

 delay(5);

 LED78();

 delay(5);

 LED79();

 delay(5);

 LED80();

 delay(5);

 LED81();

 delay(5);

 LED82();

 delay(5);

 LED83();

 delay(5);

 LED84();

 delay(5);

 LED85();

 delay(5);

 LED86();

 delay(5);

 LED87();

 delay(5);

 LED88();

 delay(5);

 LED89();

 delay(5);

 LED90();

 delay(5);

 LED91();

 delay(5);

 LED92();

 delay(5);

 LED93();

 delay(5);

 LED94();

 delay(5);

 LED95();

 delay(5);

 LED96();

 delay(5);

 LED97();

 delay(5);

 LED98();

 delay(5);

 LED99();

 delay(5);

 LED100();

 delay(5);

}

void LEVELE(){

 LED101();

 delay(5);

 LED102();

 delay(5);

 LED103();

 delay(5);

 LED104();

 delay(5);

 LED105();

 delay(5);

 LED106();

 delay(5);

 LED107();

 delay(5);

 LED108();

 delay(5);

 LED109();

 delay(5);

 LED110();

 delay(5);

 LED111();

 delay(5);

 LED112();

 delay(5);

 LED113();

 delay(5);

 LED114();

 delay(5);

 LED115();

 delay(5);

 LED116();

 delay(5);

 LED117();

 delay(5);

 LED118();

 delay(5);

 LED119();

 delay(5);

 LED120();

 delay(5);

 LED121();

 delay(5);

 LED122();

 delay(5);

 LED123();

 delay(5);

 LED124();

 delay(5);

 LED125();

 delay(5);

}

//LETTERS

void A() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

 delay(10);

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, HIGH);

 delay(10);

 LED122();

 delay(10);

 LED123();

 delay(10);

 LED124();

 delay(10);

 LED72();

 delay(10);

 LED73();

 delay(10);

 LED74();

 delay(30);

}

void N(){

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

delay(10);

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, HIGH);

delay(10);

LED97();

delay(10);

LED73();

delay(10);

LED49();

delay(10);

}

void I(){

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, LOW);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

delay(10);

LED121();

delay(10);

LED122();

delay(10);

LED123();

delay(10);

LED124();

delay(10);

LED125();

delay(10);

LED21();

delay(10);

LED22();

delay(10);

LED23();

delay(10);

LED24();

delay(10);

LED25();

delay(10);

}

void E(){

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, HIGH);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

delay(10);

LED121();

delay(10);

LED122();

delay(10);

LED123();

delay(10);

LED124();

delay(10);

LED125();

delay(10);

LED21();

delay(10);

LED22();

delay(10);

LED23();

delay(10);

LED24();

delay(10);

LED25();

delay(10);

LED71();

delay(10);

LED72();

delay(10);

LED73();

delay(10);

}

void D() {

COL21();

delay(10);

LED122();

delay(10);

LED123();

delay(10);

LED124();

delay(10);

LED100();

delay(10);

LED75();

delay(10);

LED50();

delay(10);

LED22();

delay(10);

LED23();

delay(10);

LED24();

delay(10);

}

void W(){

COL21();

delay(10);

COL25();

delay(10);

LED47();

delay(10);

LED49();

delay(10);

LED73();

delay(10);

}

void G(){

COL21();

delay(10);

LED121();

delay(10);

LED122();

delay(10);

LED123();

delay(10);

LED124();

delay(10);

LED125();

delay(10);

LED21();

delay(10);

LED22();

delay(10);

LED23();

delay(10);

LED24();

delay(10);

LED25();

delay(10);

LED50();

delay(10);

LED75();

delay(10);

LED74();

delay(10);

LED73();

delay(10);

}

void H(){

COL21();

delay(10);

COL25();

delay(10);

LED72();

delay(10);

LED73();

delay(10);

LED74();

delay(10);

}

void T(){

COL23();

delay(10);

LED121();

delay(10);

LED122();

delay(10);

LED124();

delay(10);

LED125();

delay(10);

}

void S(){

LED121();

delay(10);

LED122();

delay(10);

LED123();

delay(10);

LED124();

delay(10);

LED125();

delay(10);

LED96();

delay(10);

LED71();

delay(10);

LED72();

delay(10);

LED73();

delay(10);

LED74();

delay(10);

LED75();

delay(10);

LED50();

delay(10);

LED21();

delay(10);

LED22();

delay(10);

LED23();

delay(10);

LED24();

delay(10);

LED25();

delay(10);

}

void C(){

LED121();

delay(10);

LED122();

delay(10);

LED123();

delay(10);

LED124();

delay(10);

LED125();

delay(10);

COL21();

delay(10);

LED21();

delay(10);

LED22();

delay(10);

LED23();

delay(10);

LED24();

delay(10);

LED25();

delay(10);

}

void O(){

COL21();

delay(10);

COL25();

delay(10);

LED122();

delay(10);

LED123();

delay(10);

LED124();

delay(10);

LED22();

delay(10);

LED23();

delay(10);

LED24();

delay(10);

}

void L(){

COL21();

delay(10);

LED22();

delay(10);

LED23();

delay(10);

LED24();

delay(10);

LED25();

delay(10);

}

//PATTERNS

void FADEBACK(){

COL21();

delay(5);

COL22();

delay(5);

COL23();

delay(5);

COL24();

delay(5);

COL25();

delay(5);

COL21();

delay(5);

COL22();

delay(5);

COL23();

delay(5);

COL24();

delay(5);

COL25();

delay(5);

COL21();

delay(5);

COL22();

delay(5);

COL23();

delay(5);

COL24();

delay(5);

COL25();

delay(30);

COL16();

delay(5);

COL17();

delay(5);

COL18();

delay(5);

COL19();

delay(5);

COL20();

delay(5);

COL16();

delay(5);

COL17();

delay(5);

COL18();

delay(5);

COL19();

delay(5);

COL20();

delay(5);

COL16();

delay(5);

COL17();

delay(5);

COL18();

delay(5);

COL19();

delay(5);

COL20();

delay(30);

COL11();

delay(5);

COL12();

delay(5);

COL13();

delay(5);

COL14();

delay(5);

COL15();

delay(5);

COL11();

delay(5);

COL12();

delay(5);

COL13();

delay(5);

COL14();

delay(5);

COL15();

delay(5);

COL11();

delay(5);

COL12();

delay(5);

COL13();

delay(5);

COL14();

delay(5);

COL15();

delay(30);

COL6();

delay(5);

COL7();

delay(5);

COL8();

delay(5);

COL9();

delay(5);

COL10();

delay(5);

COL6();

delay(5);

COL7();

delay(5);

COL8();

delay(5);

COL9();

delay(5);

COL10();

delay(5);

COL6();

delay(5);

COL7();

delay(5);

COL8();

delay(5);

COL9();

delay(5);

COL10();

delay(30);

COL1();

delay(5);

COL2();

delay(5);

COL3();

delay(5);

COL4();

delay(5);

COL5();

delay(5);

COL1();

delay(5);

COL2();

delay(5);

COL3();

delay(5);

COL4();

delay(5);

COL5();

delay(5);

COL1();

delay(5);

COL2();

delay(5);

COL3();

delay(5);

COL4();

delay(5);

COL5();

delay(30);

}

void FADEFRONT(){

COL1();

delay(5);

COL2();

delay(5);

COL3();

delay(5);

COL4();

delay(5);

COL5();

delay(5);

COL1();

delay(5);

COL2();

delay(5);

COL3();

delay(5);

COL4();

delay(5);

COL5();

delay(5);

COL1();

delay(5);

COL2();

delay(5);

COL3();

delay(5);

COL4();

delay(5);

COL5();

delay(30);

COL6();

delay(5);

COL7();

delay(5);

COL8();

delay(5);

COL9();

delay(5);

COL10();

delay(5);

COL6();

delay(5);

COL7();

delay(5);

COL8();

delay(5);

COL9();

delay(5);

COL10();

delay(5);

COL6();

delay(5);

COL7();

delay(5);

COL8();

delay(5);

COL9();

delay(5);

COL10();

delay(30);

COL11();

delay(5);

COL12();

delay(5);

COL13();

delay(5);

COL14();

delay(5);

COL15();

delay(5);

COL11();

delay(5);

COL12();

delay(5);

COL13();

delay(5);

COL14();

delay(5);

COL15();

delay(5);

COL11();

delay(5);

COL12();

delay(5);

COL13();

delay(5);

COL14();

delay(5);

COL15();

delay(30);

COL16();

delay(5);

COL17();

delay(5);

COL18();

delay(5);

COL19();

delay(5);

COL20();

delay(5);

COL16();

delay(5);

COL17();

delay(5);

COL18();

delay(5);

COL19();

delay(5);

COL20();

delay(5);

COL16();

delay(5);

COL17();

delay(5);

COL18();

delay(5);

COL19();

delay(5);

COL20();

delay(30);

COL21();

delay(5);

COL22();

delay(5);

COL23();

delay(5);

COL24();

delay(5);

COL25();

delay(5);

COL21();

delay(5);

COL22();

delay(5);

COL23();

delay(5);

COL24();

delay(5);

COL25();

delay(5);

COL21();

delay(5);

COL22();

delay(5);

COL23();

delay(5);

COL24();

delay(5);

COL25();

delay(30);

}

void COLFADER(){

 COL1();

delay(30);

COL2();

delay(5);

COL6();

COL2();

delay(5);

COL6();

COL2();

delay(5);

COL6();

COL2();

delay(5);

COL6();

COL2();

delay(5);

COL6();

delay(30);

COL3();

delay(5);

COL7();

delay(5);

COL11();

delay(5);

COL3();

delay(5);

COL7();

delay(5);

COL11();

delay(5);

COL3();

delay(5);

COL7();

delay(5);

COL11();

delay(5);

COL3();

delay(5);

COL7();

delay(5);

COL11();

delay(5);

COL3();

delay(5);

COL7();

delay(5);

COL11();

delay(30);

COL4();

delay(5);

COL8();

delay(5);

COL12();

delay(5);

COL16();

delay(5);

COL4();

delay(5);

COL8();

delay(5);

COL12();

delay(5);

COL16();

delay(5);

COL4();

delay(5);

COL8();

delay(5);

COL12();

delay(5);

COL16();

delay(5);

COL4();

delay(5);

COL8();

delay(5);

COL12();

delay(5);

COL16();

delay(5);

COL4();

delay(5);

COL8();

delay(5);

COL12();

delay(5);

COL16();

delay(30);

COL5();

delay(5);

COL9();

delay(5);

COL13();

delay(5);

COL17();

delay(5);

COL21();

delay(5);

COL5();

delay(5);

COL9();

delay(5);

COL13();

delay(5);

COL17();

delay(5);

COL21();

delay(5);

COL5();

delay(5);

COL9();

delay(5);

COL13();

delay(5);

COL17();

delay(5);

COL21();

delay(5);

COL5();

delay(5);

COL9();

delay(5);

COL13();

delay(5);

COL17();

delay(5);

COL21();

delay(5);

COL5();

delay(5);

COL9();

delay(5);

COL13();

delay(5);

COL17();

delay(5);

COL21();

delay(30);

COL10();

delay(5);

COL14();

delay(5);

COL18();

delay(5);

COL22();

delay(5);

COL10();

delay(5);

COL14();

delay(5);

COL18();

delay(5);

COL22();

delay(5);

COL10();

delay(5);

COL14();

delay(5);

COL18();

delay(5);

COL22();

delay(5);

COL10();

delay(5);

COL14();

delay(5);

COL18();

delay(5);

COL22();

delay(5);

COL10();

delay(5);

COL14();

delay(5);

COL18();

delay(5);

COL22();

delay(30);

COL15();

delay(5);

COL19();

delay(5);

COL23();

delay(5);

COL15();

delay(5);

COL19();

delay(5);

COL23();

delay(5);

COL15();

delay(5);

COL19();

delay(5);

COL23();

delay(5);

COL15();

delay(5);

COL19();

delay(5);

COL23();

delay(5);

COL15();

delay(5);

COL19();

delay(5);

COL23();

delay(30);

COL20();

delay(5);

COL24();

delay(5);

COL20();

delay(5);

COL24();

delay(5);

COL20();

delay(5);

COL24();

delay(5);

COL20();

delay(5);

COL24();

delay(5);

COL20();

delay(5);

COL24();

delay(30);

COL25();

delay(30);

}

void COLFADEL(){

 COL25();

delay(30);

 COL20();

delay(5);

COL24();

delay(5);

COL20();

delay(5);

COL24();

delay(5);

COL20();

delay(5);

COL24();

delay(5);

COL20();

delay(5);

COL24();

delay(5);

COL20();

delay(5);

COL24();

delay(30);

COL15();

delay(5);

COL19();

delay(5);

COL23();

delay(5);

COL15();

delay(5);

COL19();

delay(5);

COL23();

delay(5);

COL15();

delay(5);

COL19();

delay(5);

COL23();

delay(5);

COL15();

delay(5);

COL19();

delay(5);

COL23();

delay(5);

COL15();

delay(5);

COL19();

delay(5);

COL23();

delay(30);

COL10();

delay(5);

COL14();

delay(5);

COL18();

delay(5);

COL22();

delay(5);

COL10();

delay(5);

COL14();

delay(5);

COL18();

delay(5);

COL22();

delay(5);

COL10();

delay(5);

COL14();

delay(5);

COL18();

delay(5);

COL22();

delay(5);

COL10();

delay(5);

COL14();

delay(5);

COL18();

delay(5);

COL22();

delay(5);

COL10();

delay(5);

COL14();

delay(5);

COL18();

delay(5);

COL22();

delay(30);

COL5();

delay(5);

COL9();

delay(5);

COL13();

delay(5);

COL17();

delay(5);

COL21();

delay(5);

COL5();

delay(5);

COL9();

delay(5);

COL13();

delay(5);

COL17();

delay(5);

COL21();

delay(5);

COL5();

delay(5);

COL9();

delay(5);

COL13();

delay(5);

COL17();

delay(5);

COL21();

delay(5);

COL5();

delay(5);

COL9();

delay(5);

COL13();

delay(5);

COL17();

delay(5);

COL21();

delay(5);

COL5();

delay(5);

COL9();

delay(5);

COL13();

delay(5);

COL17();

delay(5);

COL21();

delay(30);

COL4();

delay(5);

COL8();

delay(5);

COL12();

delay(5);

COL16();

delay(5);

COL4();

delay(5);

COL8();

delay(5);

COL12();

delay(5);

COL16();

delay(5);

COL4();

delay(5);

COL8();

delay(5);

COL12();

delay(5);

COL16();

delay(5);

COL4();

delay(5);

COL8();

delay(5);

COL12();

delay(5);

COL16();

delay(5);

COL4();

delay(5);

COL8();

delay(5);

COL12();

delay(5);

COL16();

delay(30);

COL3();

delay(5);

COL7();

delay(5);

COL11();

delay(5);

COL3();

delay(5);

COL7();

delay(5);

COL11();

delay(5);

COL3();

delay(5);

COL7();

delay(5);

COL11();

delay(5);

COL3();

delay(5);

COL7();

delay(5);

COL11();

delay(5);

COL3();

delay(5);

COL7();

delay(5);

COL11();

delay(30);

COL2();

delay(5);

COL6();

COL2();

delay(5);

COL6();

COL2();

delay(5);

COL6();

COL2();

delay(5);

COL6();

COL2();

delay(5);

COL6();

delay(30);

COL1();

delay(30);

}

void SPIRAL() {

 COL1();

 delay(25);

 COL2();

 delay(25);

 COL3();

 delay(25);

 COL4();

 delay(25);

 COL5();

 delay(25);

 COL10();

 delay(25);

 COL15();

 delay(25);

 COL20();

 delay(25);

 COL25();

 delay(25);

 COL24();

 delay(25);

 COL23();

 delay(25);

 COL22();

 delay(25);

 COL21();

 delay(25);

 COL16();

 delay(25);

 COL11();

 delay(25);

 COL6();

 delay(25);

 COL7();

 delay(25);

 COL8();

 delay(25);

 COL9();

 delay(25);

 COL14();

 delay(25);

 COL19();

 delay(25);

 COL18();

 delay(25);

 COL17();

 delay(25);

 COL12();

 delay(25);

 COL13();

 delay(25);

 COL12();

 delay(25);

 COL17();

 delay(25);

 COL18();

 delay(25);

 COL19();

 delay(25);

 COL14();

 delay(25);

 COL9();

 delay(25);

 COL8();

 delay(25);

 COL7();

 delay(25);

 COL6();

 delay(25);

 COL11();

 delay(25);

 COL16();

 delay(25);

 COL21();

 delay(25);

 COL22();

 delay(25);

 COL23();

 delay(25);

 COL24();

 delay(25);

 COL25();

 delay(25);

 COL20();

 delay(25);

 COL15();

 delay(25);

 COL10();

 delay(25);

 COL5();

 delay(25);

 COL4();

 delay(25);

 COL3();

 delay(25);

 COL2();

 delay(25);

 COL1();

 delay(25);

}

void TESTLED() {

 LED1();

 delay(25);

 LED2();

 delay(25);

 LED3();

 delay(25);

 LED4();

 delay(25);

 LED5();

 delay(25);

 LED6();

 delay(25);

 LED7();

 delay(25);

 LED8();

 delay(25);

 LED9();

 delay(25);

 LED10();

 delay(25);

 LED11();

 delay(25);

 LED12();

 delay(25);

 LED13();

 delay(25);

 LED14();

 delay(25);

 LED15();

 delay(25);

 LED16();

 delay(25);

 LED17();

 delay(25);

 LED18();

 delay(25);

 LED19();

 delay(25);

 LED20();

 delay(25);

 LED21();

 delay(25);

 LED22();

 delay(25);

 LED23();

 delay(25);

 LED24();

 delay(25);

 LED25();

 delay(25);

 LED26();

 delay(25);

 LED27();

 delay(25);

 LED28();

 delay(25);

 LED29();

 delay(25);

 LED30();

 delay(25);

 LED31();

 delay(25);

 LED32();

 delay(25);

 LED33();

 delay(25);

 LED34();

 delay(25);

 LED35();

 delay(25);

 LED36();

 delay(25);

 LED37();

 delay(25);

 LED38();

 delay(25);

 LED39();

 delay(25);

 LED40();

 delay(25);

 LED41();

 delay(25);

 LED42();

 delay(25);

 LED43();

 delay(25);

 LED44();

 delay(25);

 LED45();

 delay(25);

 LED46();

 delay(25);

 LED47();

 delay(25);

 LED48();

 delay(25);

 LED49();

 delay(25);

 LED50();

 delay(25);

 LED51();

 delay(25);

 LED52();

 delay(25);

 LED53();

 delay(25);

 LED54();

 delay(25);

 LED55();

 delay(25);

 LED56();

 delay(25);

 LED57();

 delay(25);

 LED58();

 delay(25);

 LED59();

 delay(25);

 LED60();

 delay(25);

 LED61();

 delay(25);

 LED62();

 delay(25);

 LED63();

 delay(25);

 LED64();

 delay(25);

 LED65();

 delay(25);

 LED66();

 delay(25);

 LED67();

 delay(25);

 LED68();

 delay(25);

 LED69();

 delay(25);

 LED70();

 delay(25);

 LED71();

 delay(25);

 LED72();

 delay(25);

 LED73();

 delay(25);

 LED74();

 delay(25);

 LED75();

 delay(25);

 LED76();

 delay(25);

 LED77();

 delay(25);

 LED78();

 delay(25);

 LED79();

 delay(25);

 LED80();

 delay(25);

 LED81();

 delay(25);

 LED82();

 delay(25);

 LED83();

 delay(25);

 LED84();

 delay(25);

 LED85();

 delay(25);

 LED86();

 delay(25);

 LED87();

 delay(25);

 LED88();

 delay(25);

 LED89();

 delay(25);

 LED90();

 delay(25);

 LED91();

 delay(25);

 LED92();

 delay(25);

 LED93();

 delay(25);

 LED94();

 delay(25);

 LED95();

 delay(25);

 LED96();

 delay(25);

 LED97();

 delay(25);

 LED98();

 delay(25);

 LED99();

 delay(25);

 LED100();

 delay(25);

 LED101();

 delay(25);

 LED102();

 delay(25);

 LED103();

 delay(25);

 LED104();

 delay(25);

 LED105();

 delay(25);

 LED106();

 delay(25);

 LED107();

 delay(25);

 LED108();

 delay(25);

 LED109();

 delay(25);

 LED110();

 delay(25);

 LED111();

 delay(25);

 LED112();

 delay(25);

 LED113();

 delay(25);

 LED114();

 delay(25);

 LED115();

 delay(25);

 LED116();

 delay(25);

 LED117();

 delay(25);

 LED118();

 delay(25);

 LED119();

 delay(25);

 LED120();

 delay(25);

 LED121();

 delay(25);

 LED122();

 delay(25);

 LED123();

 delay(25);

 LED124();

 delay(25);

 LED125();

 delay(25);

}

void ANNIE(){

 A();

 A();

 A();

 A();

 A();

 A();

 delay(30);

 N();

 N();

 N();

 N();

 N();

 N();

 delay(150);

 N();

 N();

 N();

 N();

 N();

 N();

 delay(30);

 I();

 I();

 I();

 I();

 I();

 I();

 delay(30);

 E();

 E();

 E();

 E();

 E();

 E();

 delay(30);

}

//void DWIGHT(){

//D();

//D();

//D();

//D();

//D();

//D();

//delay(30);

//W();

//W();

//W();

//W();

//W();

//W();

//delay(30);

//I();

//I();

//I();

//I();

//I();

//I();

//delay(30);

//G();

//G();

//G();

//delay(30);

//H();

//H();

//H();

//H();

//H();

//H();

//delay(30);

//T();

//T();

//T();

//FADEBACK();

//I();

//I();

//I();

//I();

//I();

//I();

//delay(30);

//S();

//S();

//S();

//S();

//S();

//S();

//FADEBACK();

//C();

//C();

//C();

//C();

//C();

//C();

//delay(30);

//O();

//O();

//O();

//O();

//O();

//O();

//delay(150);

//O();

//O();

//O();

//O();

//O();

//O();

//delay(30);

//L();

//L();

//L();

//L();

//L();

//L();

//delay(200);

//

//}

void AMOVE() {

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

 delay(10);

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, HIGH);

 delay(10);

 LED122();

 delay(10);

 LED123();

 delay(10);

 LED124();

 delay(10);

 LED72();

 delay(10);

 LED73();

 delay(10);

 LED74();

 delay(30);

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

delay(10);

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, HIGH);

 delay(10);

 LED117();

 delay(10);

 LED118();

 delay(10);

 LED119();

 delay(10);

 LED67();

 delay(10);

 LED68();

 delay(10);

 LED69();

 delay(30);

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, LOW);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

 delay(10);

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, HIGH);

 digitalWrite(p2, LOW);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

delay(10);

 LED112();

 delay(10);

 LED113();

 delay(10);

 LED114();

 delay(10);

 LED62();

 delay(10);

 LED63();

 delay(10);

 LED64();

 delay(30);

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, LOW);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

delay(10);

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, HIGH);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, HIGH);

 digitalWrite(p4, LOW);

delay(10);

 LED107();

 delay(10);

 LED108();

 delay(10);

 LED109();

 delay(10);

 LED57();

 delay(10);

 LED58();

 delay(10);

 LED59();

 delay(30);

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, LOW);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

delay(10);

 digitalWrite(Z0, HIGH);

 digitalWrite(Z1, HIGH);

 digitalWrite(Z2, HIGH);

 digitalWrite(Z3, HIGH);

 digitalWrite(Z4, LOW);

 digitalWrite(p0, LOW);

 digitalWrite(p1, LOW);

 digitalWrite(p2, HIGH);

 digitalWrite(p3, LOW);

 digitalWrite(p4, LOW);

delay(10);

 LED102();

 delay(10);

 LED103();

 delay(10);

 LED104();

 delay(10);

 LED52();

 delay(10);

 LED53();

 delay(10);

 LED54();

 delay(30);

}

void LEVELS() {

 LEVELA();

 LEVELA();

 LEVELA();

 LEVELA();

 LEVELA();

 LEVELB();

 LEVELB();

 LEVELB();

 LEVELB();

 LEVELB();

 LEVELC();

 LEVELC();

 LEVELC();

 LEVELC();

 LEVELC();

 LEVELD();

 LEVELD();

 LEVELD();

 LEVELD();

 LEVELD();

 LEVELE();

 LEVELE();

 LEVELE();

 LEVELE();

 LEVELE();

}

void setup() {

 //set decoder pins to low

 pinMode(p0, OUTPUT);

 digitalWrite(p0, LOW);

 pinMode(p1, OUTPUT);

 digitalWrite(p0, LOW);

 pinMode(p2, OUTPUT);

 digitalWrite(p0, LOW);

 pinMode(p3, OUTPUT);

 digitalWrite(p0, LOW);

 pinMode(p4, OUTPUT);

 digitalWrite(p0, LOW);

 //set cathode pins to low

 pinMode(Z0, OUTPUT);

 digitalWrite(Z0, LOW);

 pinMode(Z1, OUTPUT);

 digitalWrite(Z1, LOW);

 pinMode(Z2, OUTPUT);

 digitalWrite(Z2, LOW);

 pinMode(Z3, OUTPUT);

 digitalWrite(Z3, LOW);

 pinMode(Z4, OUTPUT);

 digitalWrite(Z4, LOW);

 //enable decoders

 pinMode(pEN, OUTPUT);

 digitalWrite(pEN, HIGH);

}

void loop() {

 TESTLED();

 TESTLED();

 TESTLED();

 A();

 A();

 A();

 A();

 A();

 A();

 A();

 A();

 A();

 AMOVE();

 AMOVE();

 AMOVE();

 AMOVE();

 AMOVE();

 LEVELS();

 LEVELS();

 ANNIE();

 ANNIE();

 SPIRAL();

 SPIRAL();

 SPIRAL();

 SPIRAL();

 COLFADER();

 COLFADER();

 COLFADER();

 COLFADEL();

 COLFADEL();

 COLFADEL();

 COLFADER();

 COLFADEL();

 COLFADER();

 COLFADEL();

 COLFADER();

 COLFADEL();

 FADEFRONT();

 FADEFRONT();

 FADEFRONT();

 FADEBACK();

 FADEBACK();

 FADEBACK();

 FADEFRONT();

 FADEBACK();

 FADEFRONT();

 FADEBACK();

 FADEFRONT();

 FADEBACK();

// DWIGHT();

}