const int MOTION\_PIN1 = 3;

const int RELAY1 = 9;

const int MOTION\_PIN2 =4 ;

const int RELAY2 = 10;

const int MOTION\_PIN3 =5 ;

const int RELAY3 = 11;

const int MOTION\_PIN4 = 6;

const int RELAY4 = 12;

const int RELAY5 = 13;

void setup()

{

pinMode(MOTION\_PIN1, INPUT\_PULLUP);

pinMode(RELAY1, OUTPUT);

pinMode(MOTION\_PIN2, INPUT\_PULLUP);

pinMode(RELAY2, OUTPUT);

pinMode(MOTION\_PIN3, INPUT\_PULLUP);

pinMode(RELAY3, OUTPUT);

pinMode(MOTION\_PIN4, INPUT\_PULLUP);

pinMode(RELAY4, OUTPUT);

pinMode(RELAY5, OUTPUT);

}

void loop()

{

int proximity1 = digitalRead(MOTION\_PIN1);

int proximity2 = digitalRead(MOTION\_PIN2);

int proximity3 = digitalRead(MOTION\_PIN3);

int proximity4 = digitalRead(MOTION\_PIN4);

if (proximity1 == HIGH && proximity2 == LOW && proximity3 == LOW && proximity4 == LOW)

{

digitalWrite(RELAY1, HIGH);

digitalWrite(RELAY2, LOW);

digitalWrite(RELAY3, LOW);

digitalWrite(RELAY4, LOW);

digitalWrite(RELAY5, HIGH);

}

if (proximity1 == LOW && proximity2 == HIGH && proximity3 == LOW && proximity4 == LOW)

{

digitalWrite(RELAY2, HIGH);

digitalWrite(RELAY1, LOW);

digitalWrite(RELAY3, LOW);

digitalWrite(RELAY4, LOW);

digitalWrite(RELAY5, HIGH);

}

if (proximity1 == LOW && proximity2 == LOW && proximity3 == HIGH && proximity4 == LOW)

{

digitalWrite(RELAY3, HIGH);

digitalWrite(RELAY2, LOW);

digitalWrite(RELAY1, LOW);

digitalWrite(RELAY4, LOW);

digitalWrite(RELAY5, HIGH);

}

if (proximity1 == LOW && proximity2 == LOW && proximity3 == LOW && proximity4 == HIGH)

{

digitalWrite(RELAY4, HIGH);

digitalWrite(RELAY2, LOW);

digitalWrite(RELAY3, LOW);

digitalWrite(RELAY1, LOW);

digitalWrite(RELAY5, HIGH);

}

if (proximity1 == HIGH && proximity2 == HIGH && proximity3 == LOW && proximity4 == LOW)

{

digitalWrite(RELAY1, HIGH);

digitalWrite(RELAY2, HIGH);

digitalWrite(RELAY3, LOW);

digitalWrite(RELAY4, LOW);

digitalWrite(RELAY5, HIGH);

}

if (proximity1 == LOW && proximity2 == HIGH && proximity3 == HIGH && proximity4 == LOW)

{

digitalWrite(RELAY2, HIGH);

digitalWrite(RELAY3, HIGH);

digitalWrite(RELAY4, LOW);

digitalWrite(RELAY1, LOW);

digitalWrite(RELAY5, HIGH);

}

if (proximity1 == LOW && proximity2 == LOW && proximity3 == HIGH && proximity4 == HIGH)

{

digitalWrite(RELAY3, HIGH);

digitalWrite(RELAY4, HIGH);

digitalWrite(RELAY2, LOW);

digitalWrite(RELAY1, LOW);

digitalWrite(RELAY5, HIGH);

}

if (proximity1 == HIGH && proximity2 == LOW && proximity3 == LOW && proximity4 == HIGH)

{

digitalWrite(RELAY1, HIGH);

digitalWrite(RELAY4, HIGH);

digitalWrite(RELAY3, LOW);

digitalWrite(RELAY2, LOW);

digitalWrite(RELAY5, HIGH);

}

if (proximity1 == HIGH && proximity2 == HIGH && proximity3 == HIGH && proximity4 == LOW)

{

digitalWrite(RELAY1, HIGH);

digitalWrite(RELAY2, HIGH);

digitalWrite(RELAY3, HIGH);

digitalWrite(RELAY4, LOW);

digitalWrite(RELAY5, HIGH);

}

if (proximity1 == LOW && proximity2 == HIGH && proximity3 == HIGH && proximity4 == HIGH)

{

digitalWrite(RELAY2, HIGH);

digitalWrite(RELAY3, HIGH);

digitalWrite(RELAY4, HIGH);

digitalWrite(RELAY1, LOW);

digitalWrite(RELAY5, HIGH);

}

if (proximity1 == HIGH && proximity2 == LOW && proximity3 == HIGH && proximity4 == HIGH)

{

digitalWrite(RELAY1, HIGH);

digitalWrite(RELAY3, HIGH);

digitalWrite(RELAY4, HIGH);

digitalWrite(RELAY2, LOW);

digitalWrite(RELAY5, HIGH);

}

if (proximity1 == HIGH && proximity2 == HIGH && proximity3 == LOW && proximity4 == HIGH)

{

digitalWrite(RELAY1, HIGH);

digitalWrite(RELAY2, HIGH);

digitalWrite(RELAY4, HIGH);

digitalWrite(RELAY3, LOW);

digitalWrite(RELAY5, HIGH);

}

if (proximity1 == HIGH && proximity2 == HIGH && proximity3 == HIGH && proximity4 == LOW)

{

digitalWrite(RELAY1, HIGH);

digitalWrite(RELAY2, HIGH);

digitalWrite(RELAY3, HIGH);

digitalWrite(RELAY4, LOW);

digitalWrite(RELAY5, HIGH);

}

if (proximity1 == HIGH && proximity2 == HIGH && proximity3 == HIGH && proximity4 == HIGH)

{

digitalWrite(RELAY1, HIGH);

digitalWrite(RELAY2, HIGH);

digitalWrite(RELAY3, HIGH);

digitalWrite(RELAY4, HIGH);

digitalWrite(RELAY5, HIGH);

}

if (proximity1 == LOW && proximity2 == LOW && proximity3 == LOW && proximity4 == LOW)

{

digitalWrite(RELAY2, LOW);

digitalWrite(RELAY1, LOW);

digitalWrite(RELAY3, LOW);

digitalWrite(RELAY4, LOW);

digitalWrite(RELAY5, HIGH);

}

}