int trig\_pin = 11;

int echo\_pin = 10;

int led1 = 6, led2 = 5, led3 = 4;

int pulse\_signal;

float flood\_raise=0;

float flood\_depth;

void setup()

{

pinMode(trig\_pin, OUTPUT);

pinMode(echo\_pin, INPUT);

pinMode(led1, OUTPUT);

pinMode(led2, OUTPUT);

pinMode(led3, OUTPUT);

pinMode(led4, OUTPUT);

Serial.begin(9600);

}

void loop()

{

digitalWrite(trig\_pin, HIGH);

delayMicroseconds(10);

digitalWrite(trig\_pin, LOW);

pulse\_signal = pulseIn(echo\_pin, HIGH);

flood\_raise = pulse\_signal \* 0.017;

flood\_depth = 23 - flood\_raise;

Serial.print("flood raise from the ground is ");

Serial.print(flood\_raise);

Serial.println(" cm");

Serial.print("flood depth is ");

Serial.print(flood\_depth);

Serial.println(" cm");

Serial.println("");

delay(2000);

if(flood\_depth <= 7.6)

{

digitalWrite(led1, HIGH);

digitalWrite(led2, LOW);

digitalWrite(led3, LOW);

}

else if(flood\_depth > 7.6 && flood\_depth <= 15.2)

{

digitalWrite(led1, LOW);

digitalWrite(led2, HIGH);

digitalWrite(led3, LOW);

}

else(flood\_depth >15.2)

{

digitalWrite(led1, LOW);

digitalWrite(led2, LOW);

digitalWrite(led3, HIGH);

}

}