const int trigPin = 9;

const int echoPin = 10;

long duration;

int dCm, dInch;

void setup() {

Serial.begin(9600);

pinMode(trigPin, OUTPUT);

pinMode(echoPin, INPUT);

for(int i = 1 ; i<=6;i++)

{

pinMode(i,OUTPUT);

}

}

void loop() {

digitalWrite(trigPin, LOW);

delayMicroseconds(2);

digitalWrite(trigPin, HIGH);

delayMicroseconds(10);

digitalWrite(trigPin, LOW);

duration = pulseIn(echoPin, HIGH);

dCm= duration\*0.034/2;

dInch = duration\*0.0133/2;

if(dCm<2){

digitalWrite(6,LOW);

digitalWrite(2,LOW);

digitalWrite(3,LOW);

digitalWrite(4,LOW);

digitalWrite(5,LOW);

}

else if(dCm>2&&dCm < 5 ){

digitalWrite(6,HIGH);

digitalWrite(2,LOW);

digitalWrite(3,LOW);

digitalWrite(4,LOW);

digitalWrite(5,LOW);

}

else if(dCm > 5 && dCm <10){

digitalWrite(6,HIGH);

digitalWrite(2,HIGH);

digitalWrite(3,LOW);

digitalWrite(4,LOW);

digitalWrite(5,LOW);

}

else if(dCm > 10 && dCm <15){

digitalWrite(6,HIGH);

digitalWrite(2,HIGH);

digitalWrite(3,HIGH);

digitalWrite(4,LOW);

digitalWrite(5,LOW);

}

else if(dCm > 15 && dCm <20){

digitalWrite(6,HIGH);

digitalWrite(2,HIGH);

digitalWrite(3,HIGH);

digitalWrite(4,HIGH);

digitalWrite(5,LOW);

}else if(dCm>20){

digitalWrite(6,HIGH);

digitalWrite(2,HIGH);

digitalWrite(3,HIGH);

digitalWrite(4,HIGH);

digitalWrite(5,HIGH);

}

Serial.print("Distance: "); // Prints string "Distance"

Serial.print(dCm); // Prints the distance value from the sensor

Serial.println(" cm");

delay(10);

Serial.print("Distance: ");

Serial.print(dInch);

Serial.println(" inch");

delay(10);

}