

HOME AUTOMATION SYSTEM USING 4-PIN ULTRASONIC SENSOR

```
#define echo 11

#define trig 12

long distance, duration;

void setup() {

  pinMode(echo,INPUT);
  pinMode(trig,OUTPUT);
  pinMode(6,OUTPUT);
  pinMode(7,OUTPUT);

  Serial.begin(9600);
}

void loop() {

  digitalWrite(trig,LOW);
  delayMicroseconds(2);
  digitalWrite(trig,HIGH);
  delayMicroseconds(10);
  digitalWrite(trig,LOW);
  duration=pulseIn(echo,HIGH);
  distance=(duration/58.2);
  Serial.println(distance);
  if(distance>=22 && distance<40)
  {
    digitalWrite(6 ,HIGH);
    digitalWrite(7,HIGH);
  }
  else if(distance<15)
  {
    digitalWrite(6 ,LOW);
    digitalWrite(7,LOW);
  }
}
```

```
else
{
digitalWrite(6,LOW);
digitalWrite(7,LOW);
}
}
```