# BANNARI AMMAN INSTITUTE OF TECHNOLOGY, SATHYAMANGALAM

### Department of Computer Science and Engineering

#### **IOT** Assignment

**Topic:** Assignment on smart home automation using Arudino and Sensors

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#### Code:-

```
int t=2;
int e=3;
void setup()
  Serial.begin(9600);
  pinMode(t,OUTPUT);
  pinMode(e,INPUT);
  pinMode(12,OUTPUT);
}
void loop()
{
  digitalWrite(t,0);
  digitalWrite(t,1);
  delayMicroseconds(10);
  digitalWrite(t,0);
  float dur=pulseIn(e,1);
  float dis=(dur*0.0343)/2;
  Serial.print("Distance is: ");
  Serial.println(dis);
  if(dis>=100)
  {
   digitalWrite(8,1);
   digitalWrite(7,1);
  }
  if(dis>=100)
     for(int i=0; i<=30000; i=i+10)
  {
     tone(12,i);
```

```
delay(1000);
 noTone(12);
 delay(1000);
 double a= analogRead(A0);
 double t=(((a/1024)*5)-0.5)*100;
 Serial.print("Temp Value: ");
 Serial.println(t);
 delay(1000); if(t>=100)
    digitalWrite(8,1);
    digitalWrite(7,1);
 }
 if(t>=100)
  for(int i=0; i<=30000; i=i+10)
  tone(12,i);
  delay(1000);
  noTone(12);
  delay(1000);
 }
 if(t<100)
    digitalWrite(8,0);
   digitalWrite(7,0);
 }
}
```

## Output:-

