BANNARI AMMAN INSTITUTE OF TECHNOLOGY, SATHYAMANGALAM

Department of Computer Science and Engineering

IOT Assignment

Topic : Assignment on smart home automation using Arudino and Sensors

Name: ABHI NIVESH L

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:-