

## ASSIGNMENT 1

Date	12 September 2022
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Project Name	Project – Smart Farmer-IoT Enabled Smart Farming Application
Maximum Marks	2 Marks

### Topic : Assignment on home automation using Arduino

#### 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,LOW);
    digitalWrite(t,HIGH); delayMicroseconds(10); digitalWrite(t,LOW);
  float dur=pulseIn(e,HIGH); float dis=(dur*0.0343)/2;
  Serial.print("Distance is: ");
  Serial.println(dis);

}

if(dis>=100)//(in terms of centimeter)
{
  digitalWrite(8,HIGH); digitalWrite(7,HIGH);
}
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); //LED ON
if(t>=100)//(in terms of celsius)
{
  digitalWrite(8,HIGH); digitalWrite(7,HIGH);
}
```

```

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,LOW); digitalWrite(7,LOW);
}
}

```

**Output:**

