

### Assignment -1

#### SmartFarmer - IoT Enabled Smart Farming Application

Assignment Date	22 September 2022
Student Name	Manoj Kumar.M
Student Roll Number	721219106026
Maximum Marks	2 Marks

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:

