

## Assignment 1

Date	12 September 2022
Name	Mannoj kumar
Roll Number	718020L431
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,OUTPU
T);
}
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,HIG H); digitalWrite(7,HIG H);
}
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)*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);
H);
}
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:**

