

**Assignment -1**

Assignment Date	20 October 2022
Team ID	PNT2022TMID38150
Project Name	Project-Smart Farmer-IoT Enabled Smart Farming Application

```
void setup()
```

```
{
```

```
  Serial.begin(9600);
```

```
  pinMode(12,OUTPUT);
```

```
  pinMode(2,INPUT);
```

```
}
```

```
void loop()
```

```
{
```

```
  int motion=digitalRead(2);
```

```
  double data=analogRead(A0);
```

```
  double n=data/1024;
```

```
  double volt=n*5; //because connected to 5v
```

```
  double off=volt-0.5;
```

```
  double temperature=off*100;
```

```
Serial.print("Temperature Data: ");  
  
Serial.println(temperature);  
  
if(motion==1 && temperature<60){  
    Serial.println("Motion is Detected");  
    tone(12,1000);  
}  
  
else if(motion==0 && temperature>60){  
    Serial.println("Temperature is more than 60°C");  
    tone(12,2000);  
}  
  
else if(motion==1 && temperature>60)  
{  
    Serial.println("Motion is Detected");  
    Serial.println("Temperature is more than 60°C");  
    tone(12,5000);  
}  
  
else if(motion==0 && temperature<60)  
    noTone(12);  
}
```