

Assignment -1
Arduino Interfacing

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|---------------------|-------------------|
| Assignment Date | 19 September 2022 |
| Student Name | Karthick Vishnu R |
| Student Roll Number | 111519106069 |
| Maximum Marks | 2 Marks |

Question-1:

Design Temperature and PIR Sensor based Buzzer Alarm.

Solution:

```
void setup()
{
  Serial.begin(9600);
  pinMode(2,INPUT);
  pinMode(12,OUTPUT);
}

void loop()
{
  int motion=digitalRead(2);
  if(motion==1)
  {
    Serial.println("Motion is detected !");
    tone(12,10);
    delay(1000);
    noTone(12);
    delay(3000);
  }
  else
  {
    Serial.println("No Motion !!!");
    delay(1000);
  }
  double data=analogRead(A2);
```

```

double n=data/1024;

double voltage=n*5;

double offsetvol=voltage-0.5;

double temp=offsetvol*100;

if(temp>60)

{

    Serial.println("Temperature is greater than 60 degrees !!!");

    Serial.println(temp);

    tone(12,100);

    delay(1000);

    noTone(12);

    delay(3000);

}

else

{

    Serial.println("Temperature is less than 60 degrees !!!");

    Serial.println(temp);

    delay(1000);

}

}

```



