

Assignment -1
Arduino Interfacing

Assignment Date	20 September 2022
Student Name	Sakthivel S
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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);
}
}
```



