

### Assignment -1

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#### Question-1:

Build a code for Arduino board

Program:

```
#include <Servo.h>
int TEMP = 0; int
GAS = 0; int
MOTION = 0;
Servo servo_2;
void setup()
{
  pinMode(A0, INPUT);
  pinMode(A1, INPUT);
  pinMode(6, INPUT);
  Serial.begin(9600); pinMode(4,
  OUTPUT);
  servo_2.attach(2, 500, 2500);
}
void loop()
{
  TEMP = (-40 + 0.488155 * (analogRead(A0) - 20));
  GAS = analogRead(A1);
  MOTION = digitalRead(6); if
  (TEMP > 80 && GAS > 150) {
    Serial.println("FIRE ALERT !!!!!!!!!!!!!!!!!!!!!");
    digitalWrite(4, HIGH); if (MOTION == 1) {
      Serial.println("DOOR OPEN >>>>");
      servo_2.write(90);
    }
  }
  else
  {
    servo_2.write(0);
  }
  } else {
    digitalWrite(4, LOW);
    servo_2.write(0);
  }
  delay(10);
}
```

