

### Assignment -1

Assignment Date	29 October 2022
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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);
```

```
}
```

