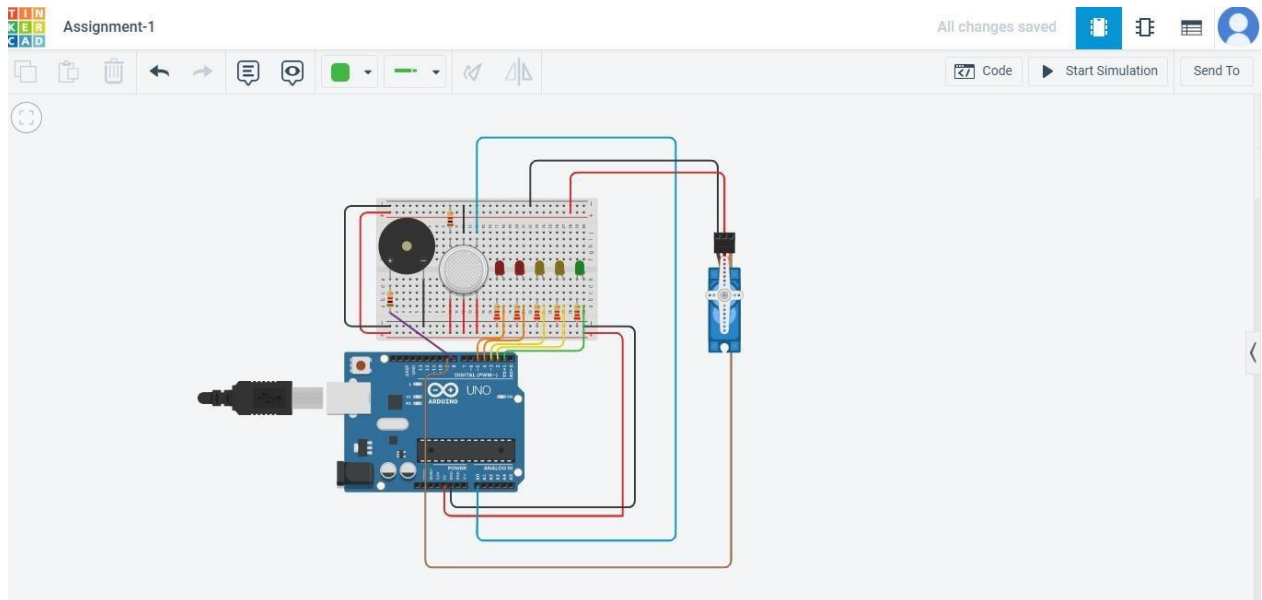


ASSIGNMENT-1(NALAIYA THIRAN)

NAME: KARTHIKEYAN.S

ROLL NUMBER: 1919106041

SCHEMATIC:-



CODE:

```
#include <Servo.h>
```

```
Servo myservo;
```

```
#define ledR2 5
```

```
#define ledR1 4
```

```
#define ledY2 3
```

```
#define ledY1 2
```

```
#define ledG1 1
```

```
#define gas A0

#define buzzer 8

#define serv 9

void setup()
{
    pinMode(ledR1, OUTPUT);
    pinMode(ledR2, OUTPUT);
    pinMode(ledY1, OUTPUT);
    pinMode(ledY2, OUTPUT);
    pinMode(ledG1, OUTPUT);
    pinMode(buzzer,OUTPUT);
    myservo.attach(serv);
    pinMode(gas, INPUT);
    Serial.begin(9600);
}

void loop()
{
    int read= analogRead(gas);
    int val= map(read,80,380,0,100);
    Serial.println(val);
    int servo= map(read,80,380,0,180);
    myservo.write(servo)
```

```
digitalWrite(ledG1, HIGH);
if(val>=20 && val<40){
digitalWrite(ledY1,HIGH);
}
if(val>=40 && val<60){
digitalWrite(ledY2,HIGH);
}
if(val>=60 && val<80){
digitalWrite(ledR1,HIGH);
}
if(val>=80){
digitalWrite(ledG1, HIGH);
digitalWrite(ledY1, HIGH);
digitalWrite(ledY2, HIGH);
digitalWrite(ledR1, HIGH);
digitalWrite(ledR2, HIGH);
delay(500);
digitalWrite(ledG1, LOW);
digitalWrite(ledY1, LOW);
digitalWrite(ledY2, LOW);
digitalWrite(ledR1, LOW);
digitalWrite(ledR2, LOW);
```

```
    delay(1000)
    tone(buzzer,1000,500);
}
if (val<80){
    noTone(buzzer);
}
}
```