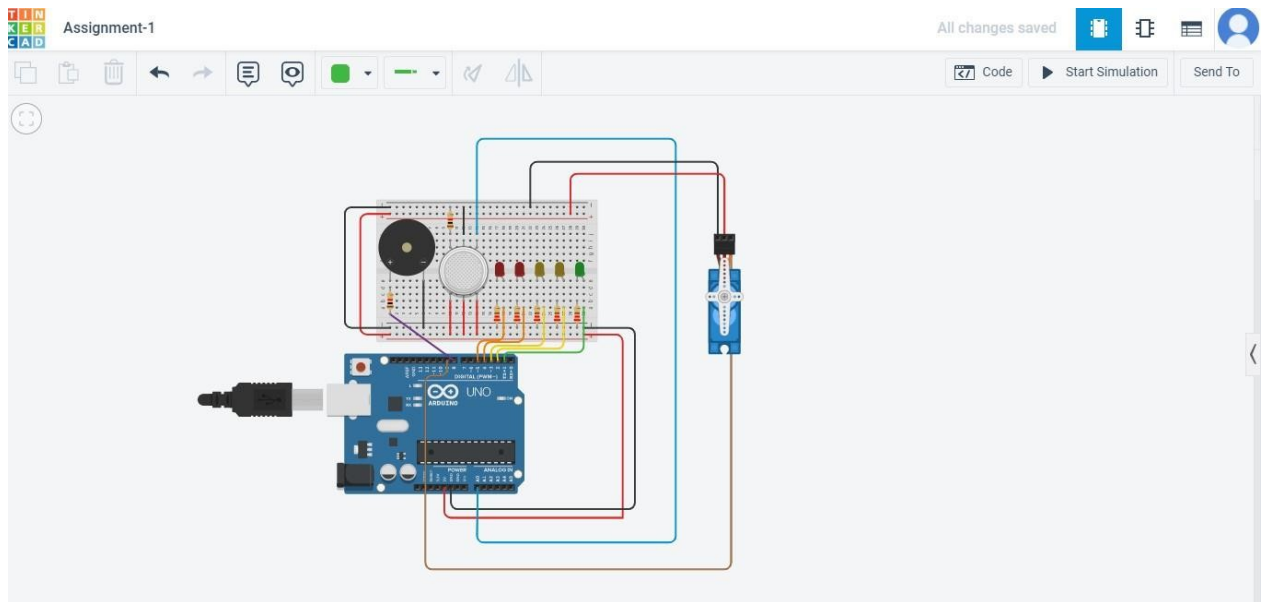# ASSIGNMENT-1(NALAIYA THIRAN)

**NAME: KRISH S**

**ROLL NUMBER: 1919106045**

**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

9void 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(ledY
1,HIGH);
}
if(val>=40 &&
  val<60){ digitalWrite(ledY2,
  HIGH);
}
if(val>=60 &&
  val<80){ digitalWrite(ledR1,
  HIGH);
}
if(val>=80){ digitalWrite(led
  G1, 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){ noTon

  e(buzzer);

 }

}
```