

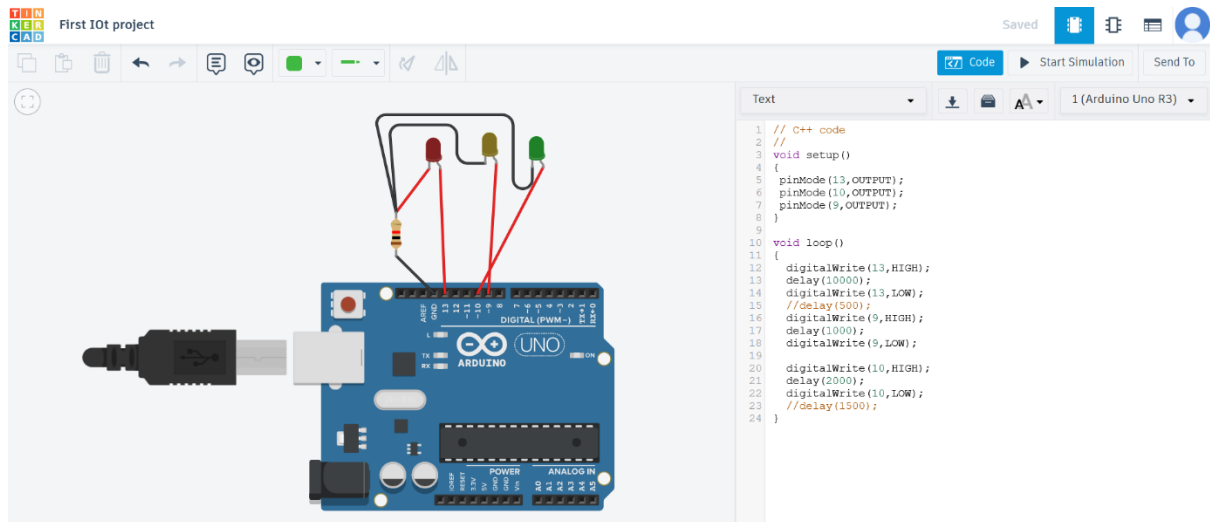
Assignment

Name – Sreekar Addanki

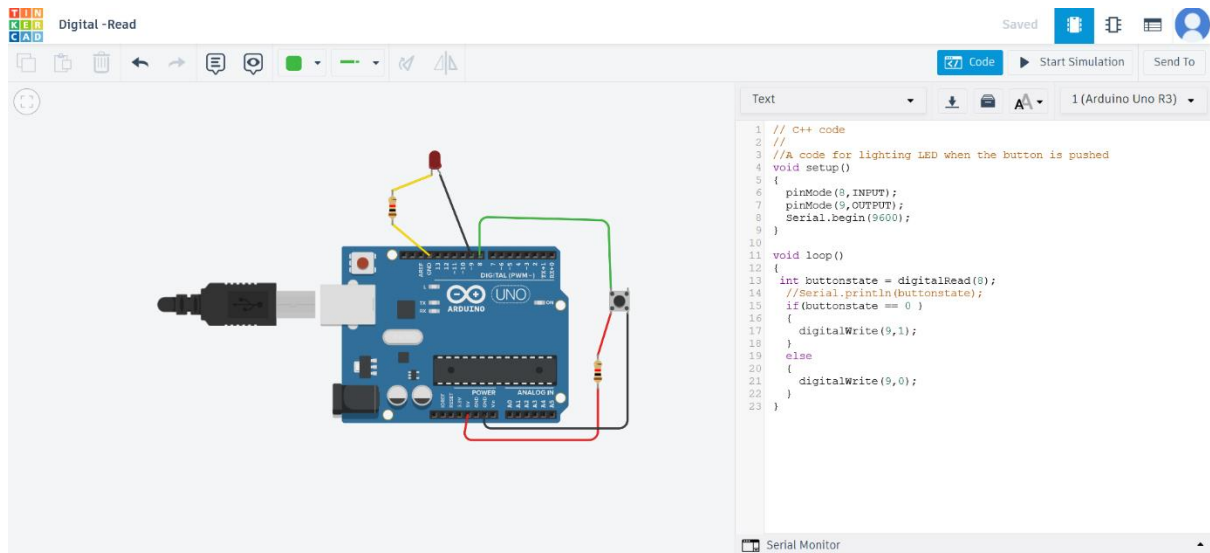
Reg No – 20BCY10127

Campus – Bhopal

1 Led traffic light



2 Digital Read



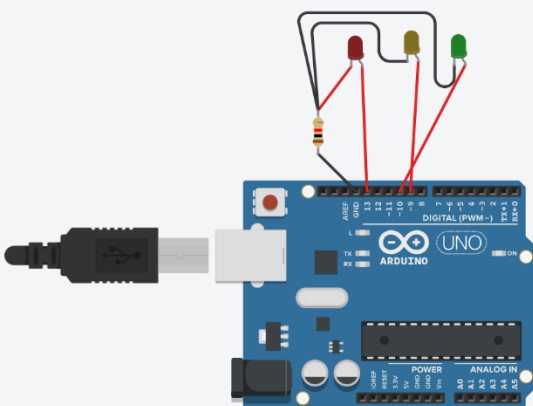
3 Potentiometer Circuit

First IoT project

Saved

Code Start Simulation Send To

1 (Arduino Uno R3)



```
1 // C++ code
2 //
3 void setup()
4 {
5   pinMode(13, OUTPUT);
6   pinMode(10, OUTPUT);
7   pinMode(9, OUTPUT);
8 }
9
10 void loop()
11 {
12   digitalWrite(13, HIGH);
13   delay(10000);
14   digitalWrite(13, LOW);
15   //delay(5000);
16   digitalWrite(9, HIGH);
17   delay(1000);
18   digitalWrite(9, LOW);
19
20   digitalWrite(10, HIGH);
21   delay(2000);
22   digitalWrite(10, LOW);
23   //delay(1500);
24 }
```

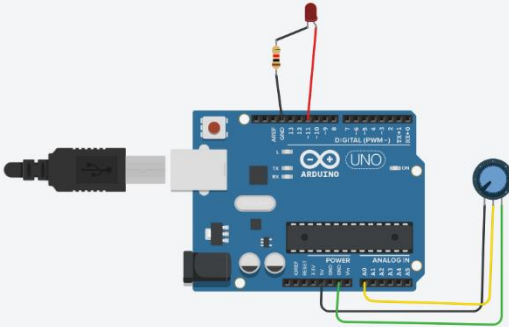
4 Grand Bigery-Snicket

Grand Bigery-Snicket

All changes saved

Code Start Simulation Send To

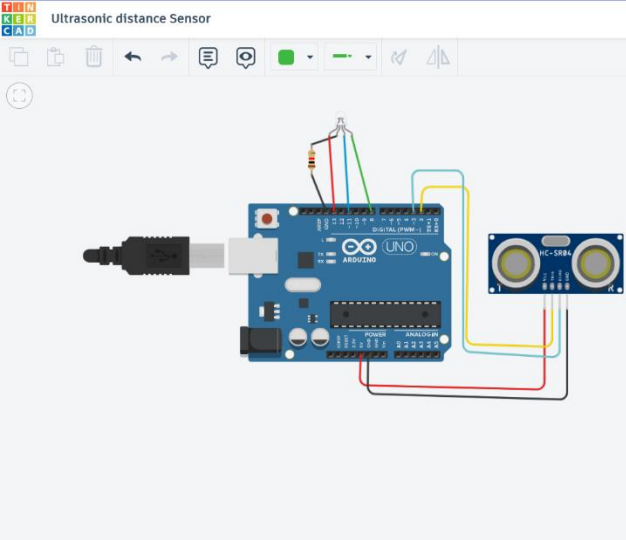
1 (Arduino Uno R3)



```
1 // C++ code
2 // using potenometer to control the intensity of light
3 int led = 11 ;
4 int a ;
5 void setup() {
6   pinMode(11, OUTPUT);
7 }
8
9
10 void loop() {
11   int value = analogRead(A0);
12   a = map(value, 0, 1023, 0, 255);
13   analogWrite(led, a);
14 }
15
16
17
18
19
```

5 Ultrasound distance sensor

Ultrasonic distance Sensor

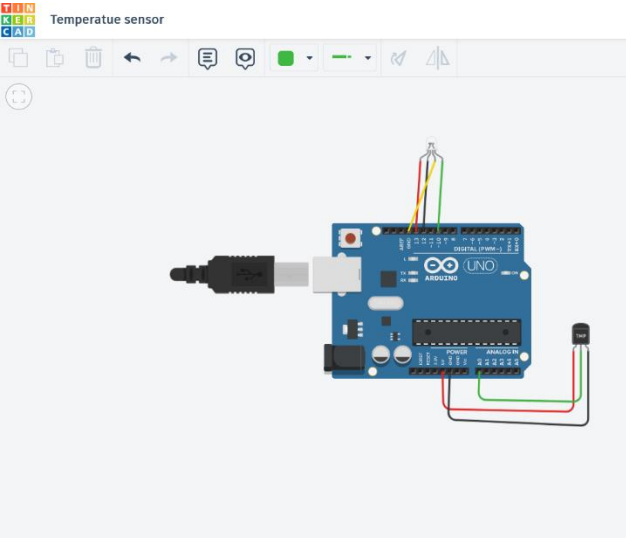


```
1 // C++ code
2 //
3 int t = 2 ;
4 int e = 3 ;
5
6 void setup()
7 {
8   Serial.begin(9600);
9   pinMode(t, OUTPUT);
10  pinMode(e, INPUT);
11  pinMode(s, OUTPUT);
12 }
13
14 void loop()
15 {
16   digitalWrite(t, LOW);
17   digitalWrite(t, HIGH);
18   delayMicroseconds(10);
19   digitalWrite(t, LOW);
20   float dur = pulseIn(e, HIGH);
21   float dis = (dur*0.0343)/2;
22   Serial.print("Distance in cm : ");
23   Serial.println(dis);
24 }
25
26
27
```

Serial Monitor

Temperature sensor

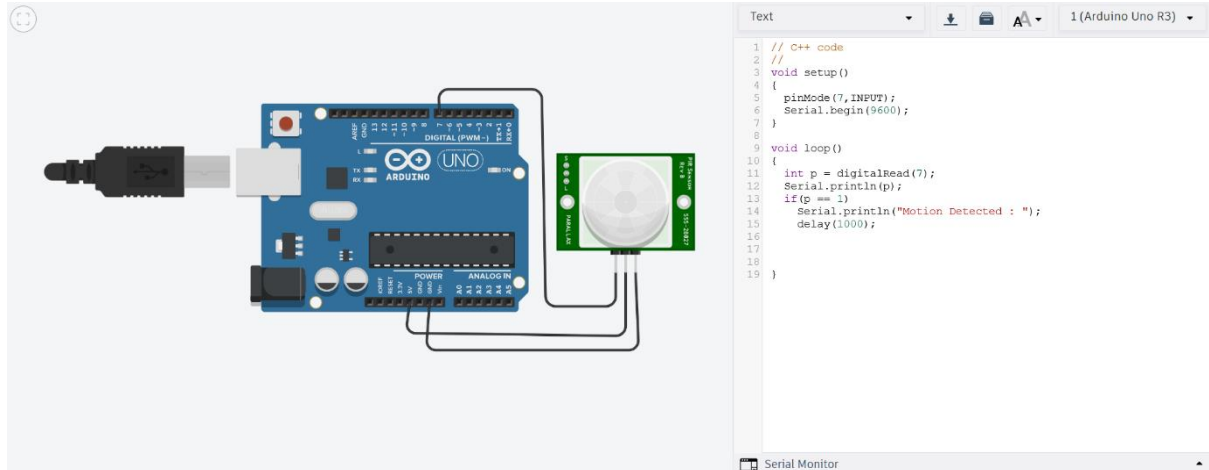
Temperatue sensor



```
1 // C++ code
2 //
3 void setup()
4 {
5   pinMode(13, OUTPUT);
6   pinMode(10, OUTPUT);
7   //Serial.begin(9600);
8 }
9
10 void loop()
11 {
12   double a = analogRead(A0);
13   Serial.print("Analog Value : ");
14   Serial.println(a);
15   double c = ((a/1024)*5)-0.5)*100 ;
16   Serial.print("CELSIUS state : ");
17   Serial.println(c);
18   if (c>0){
19     digitalWrite(13, HIGH);
20     digitalWrite(10, LOW);
21   }
22   else if (c<0){
23     digitalWrite(13, LOW);
24     digitalWrite(10, HIGH);
25   }
26   //delay(1000);
27 }
28
```

Serial Monitor

PIR senor



Servo Motors

