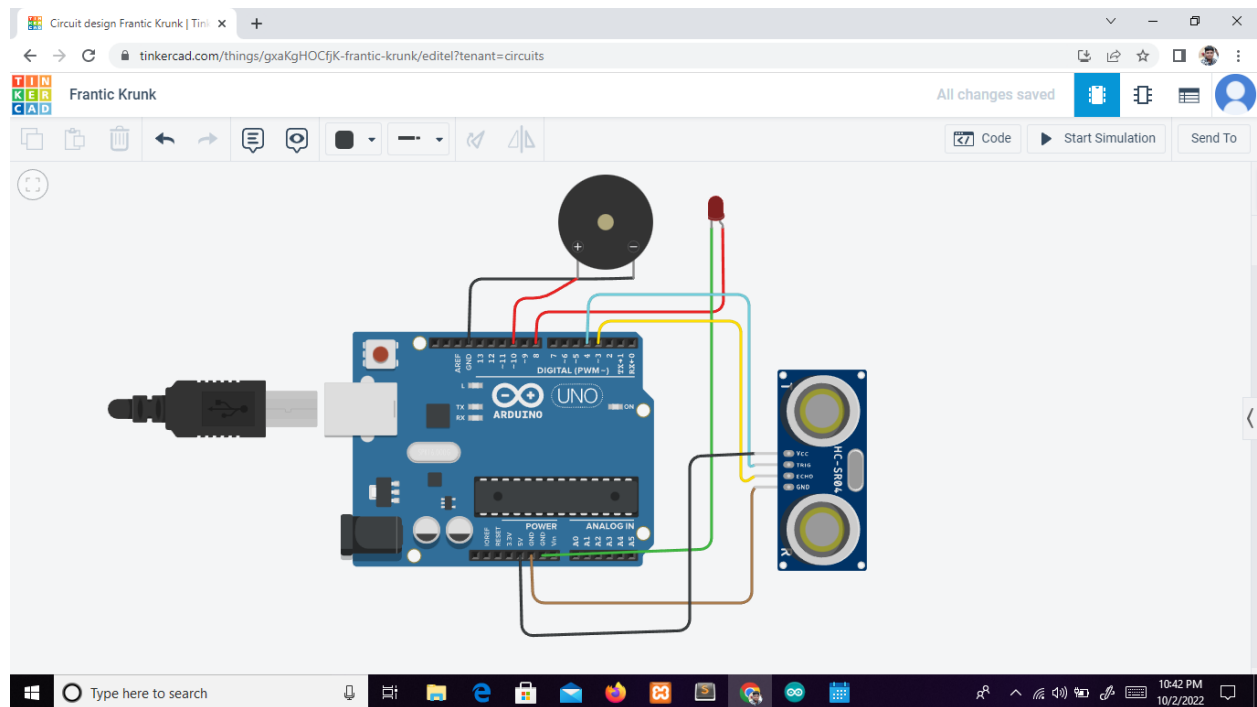


## Assignment – 1

|              |   |
|--------------|---|
| Team ID      | PNT2022TMID44989  |
| Name         | S. Surendran  |
| Project Name | Real-Time River Water Quality Monitoring and Control System |
| Marks        | 2marks  |

## Circuit Diagram



## Program Coding

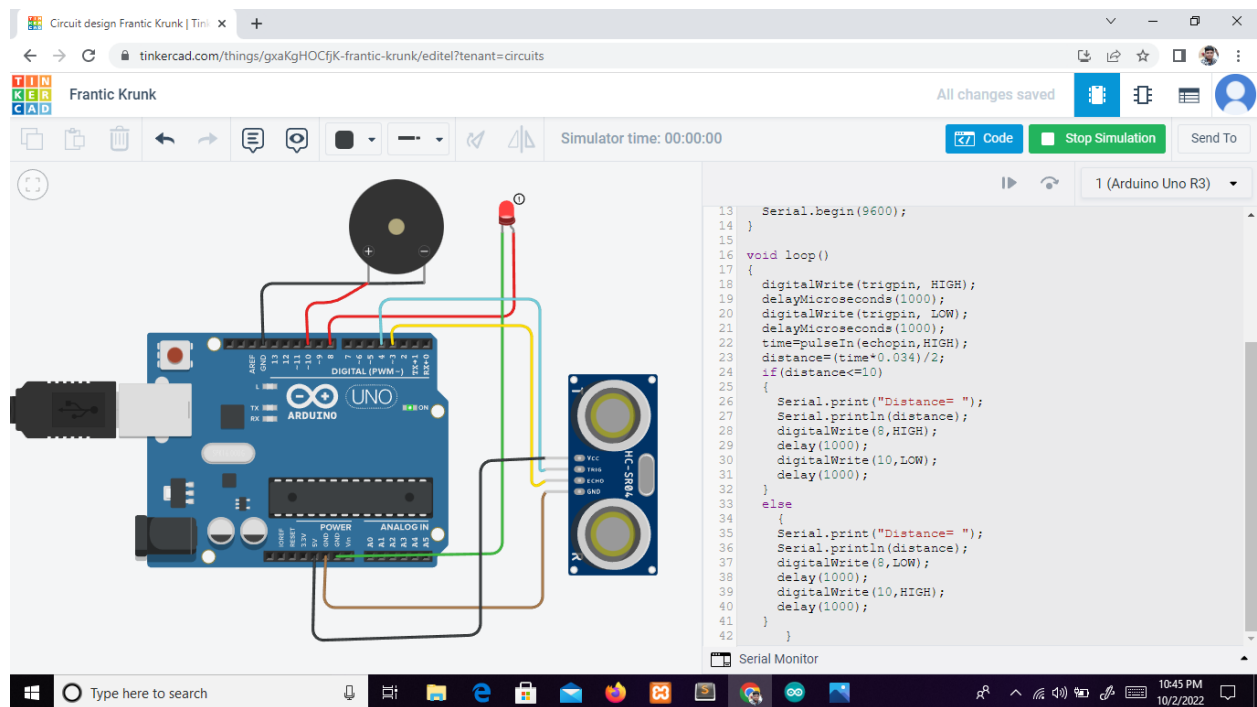
```
int trigpin=4;
int echopin=3;
int buzzerpin=10;
int time;
int distance;

void setup()
{
  pinMode(8,OUTPUT);
  pinMode(3,INPUT);
  pinMode(4,OUTPUT);
  pinMode(10,OUTPUT);
  Serial.begin(9600);
}

void loop()
{
  digitalWrite(trigpin, HIGH);
  delayMicroseconds(1000);
  digitalWrite(trigpin, LOW);
  delayMicroseconds(1000);
  time=pulseIn(echopin,HIGH);
  distance=(time*0.034)/2;
  if(distance<=10)
  {
    Serial.print("Distance= ");
    Serial.println(distance);
    digitalWrite(8,HIGH);
    delay(1000);
    digitalWrite(10,LOW);
    delay(1000);
  }
  else
  {
    Serial.print("Distance= ");
    Serial.println(distance);
  }
}
```

```
digitalWrite(8,LOW);
delay(1000);
digitalWrite(10,HIGH);
delay(1000);
}
}
```

## OUTPUT



Circuit design Frantic Kruk | Tini x +

tinkercad.com/things/gxaKgHOCfjK-frantic-kruk/editel?tenant=circuits

Frantic Kruk

All changes saved

Simulator time: 00:00:02.663

Code Stop Simulation Send To

1 (Arduino Uno R3)

```
1 int trigpin=4;
2 int echopin=3;
3 int buzzerpin=10;
4 int time;
5 int distance;
6
7 void setup()
8 {
9   pinMode(8,OUTPUT);
10  pinMode(3,INPUT);
11  pinMode(4,OUTPUT);
12  pinMode(10,OUTPUT);
13  Serial.begin(9600);
14 }
15
16 void loop()
17 {
18   digitalWrite(trigpin, HIGH);
19   delayMicroseconds(1000);
20 }
```

Serial Monitor

Distance= 0

Send Clear

Type here to search

10:43 PM 10/2/2022