

ASSIGNMENT:

Program:

```
int trigPin = 13;  // TRIG pin
int echoPin = 12;// ECHO pin
int buzzer=7;
int Tmp=A5;
int led=4;

float duration , distance ,voltage;

void setup() {
  Serial.begin (9600);

  pinMode(trigPin, OUTPUT);
  pinMode(echoPin, INPUT);
  pinMode(buzzer, OUTPUT);
  pinMode(Tmp, INPUT);
  pinMode(led, OUTPUT);
}

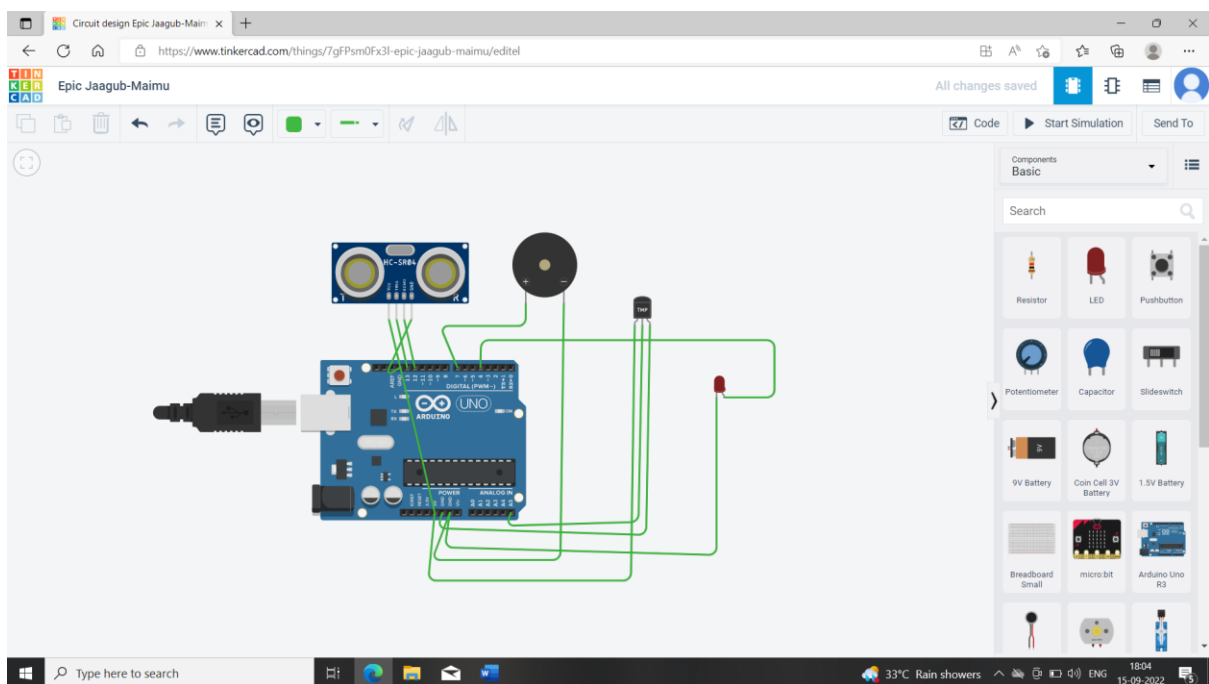
void loop(){
  digitalWrite(trigPin, HIGH);
  delayMicroseconds(10);
  digitalWrite(trigPin, LOW);
  duration = pulseIn(echoPin, HIGH);
  int reading = analogRead(Tmp);
  voltage = reading* 0.480;
  distance = 0.017*duration ;
  Serial.print("distance: ");
  Serial.print(distance);
  Serial.print("voltage:");
  Serial.print(voltage);
  delay(1000);
  if (distance<50 | voltage<20)
```

```

{
digitalWrite(buzzer, HIGH);
    digitalWrite(led, HIGH);
}
else
{
    digitalWrite(buzzer, LOW);
    digitalWrite(led, LOW);
}
}

```

CONNECTION DIAGRAM:



OUTPUT:

