Assignment-IV

Assignment Date	25 October 2022
Student Name	Gayathri M S
Student Roll Number	113119UG04028

QUESTION:

Write Code and connections in wokwi for ultrasonic sensor. Whatever distance is less than 100cms send "Alert" to ibm cloud and display in device recent events.

CODING:

```
long int echoPin=7;

long int trigPin=5;

void setup()

 {

 Serial.begin(9600);

pinMode(7,OUTPUT);

 pinMode(5,INPUT);

}

 void loop() {

 int duration, distance; digitalWrite(3,LOW);

delayMicroseconds(2);

digitalWrite(3,HIGH);

 delayMicroseconds(10);

 digitalWrite(3,LOW);

 duration=pulseIn(7,HIGH);

 distance=(duration*0.034/2);

delay(1000);
```
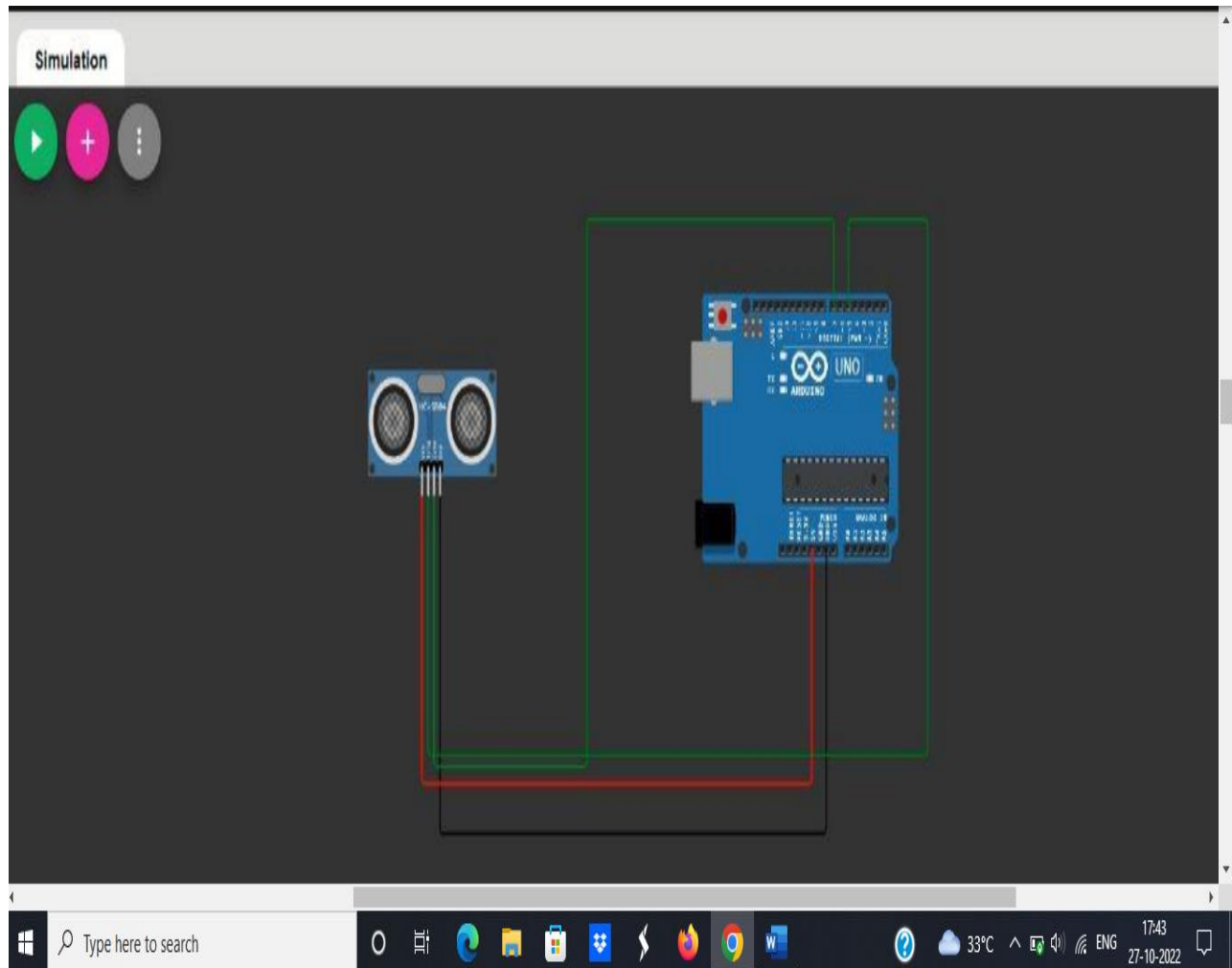
```
if (distance<=100)

 {

Serial.println("ALERT!!");

 }

}
```

SIMULATION:

Distance less than 100cms send "Alert"


```
long int echoPin=7;
long int trigPin=5;
void setup() {
Serial.begin(9600);
pinMode(7,OUTPUT);
pinMode(5,INPUT);
}
void loop()
{
int duration, distance;
digitalWrite(3,LOW);
delayMicroseconds(2);
digitalWrite(3,HIGH);
delayMicroseconds(10);
digitalWrite(3,LOW);
duration=pulseIn(7,HIGH);
distance=(duration*0.034/2);
delay(1000);
if (distance<=100)
{
Serial.println("ALERT!!");
}
}
```

ALERT!!