ASSIGNMENT-4

Team Id: PNT2022TMID39437

Assignment Date	27 October 2022
Student Name	CHITHRA C
Student Roll Number	510119205003
Maximum Marks	2 Marks

Question:

Write code and connections in wokwi for the ultrasonic sensor. Whenever the distance is less than 100 cms send an "alert"

Program:

```cpp
const int trigPin = 10;
const int echoPin = 11;
const int buzzPin = 12;

long duration;
float distance;

void setup()
{
  pinMode(trigPin, OUTPUT);
  pinMode(echoPin, INPUT);
  pinMode(buzzPin, OUTPUT);
}

void loop()
{
  digitalWrite(trigPin, LOW);
  delayMicroseconds(2);
  digitalWrite(trigPin, HIGH);
  delayMicroseconds(10);
  digitalWrite(trigPin, LOW);

  duration = pulseIn(echoPin, HIGH);
  distance = 0.034*(duration/2);

  if (distance < 100)
  {
    digitalWrite(buzzPin,HIGH);
  }
```

```
  else
  {
    digitalWrite(buzzPin,LOW);
  }
  delay(300);
}
```

Circuit Diagram: