# Assignment -1

| Assignment Date | 30 October 2022 |
|---|---|
| Student Name | Athira V R |
| Student Roll Number | 910019106007 |
| Maximum Marks | 2 Marks |

## Question :

Write a code and connections in wokwi for the ultrasonic sensor. Whenever the distance is less than
100cms send an "Alert" to IBM cloud and display in the device recent events.

**Code:**

```
int led = 8;
int trig = 2;
int echo = 5;
int buzzer = 4;

void setup()
{
  Serial.begin(9000);
  pinMode(led,OUTPUT);
  pinMode(trig,OUTPUT);
  pinMode(echo,INPUT);
  pinMode(buzzer,OUTPUT);
}

void loop()
{
  double a = analogRead(A2);
  double v = a / 1024;
  double tvolt = v * 5;
  double o = tvolt - 0.5;
  double t = 0 * 100;
  Serial.print("Temperature in degree");
  Serial.println(t);
  if(t >= 50)
```

```
  {
    digitalWrite(led,HIGH);
  }
  else
  {
    digitalWrite(led,LOW);
  }
  digitalWrite(trig,LOW);
  digitalWrite(trig,HIGH);
  delayMicroseconds(10);
  digitalWrite(trig,LOW);
  float dur = pulseIn(echo,HIGH);
  float dist = (dur * 0.343)/2;
  Serial.print("Distance");
  Serial.println(dist);
  if(dist >= 17)
  {
    digitalWrite(buzzer,HIGH);
  }
  else
  {
    digitalWrite(buzzer,LOW);
  }
}
```