

MARTHANDAM COLLEGE OF ENGINEERING AND TECHNOLOGY

Department of Information Technology

Assignment – 4

Domain: IOT

Topic :

Write code and connections in wokwi for the ultrasonic sensor. Whenever the distance is less than 100 cms send an "alert" to the IBM cloud and display in the device recent events. Upload document with wokwi share link and images of IBM cloud

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Code:-

```
int trigPin = 9;    // Trigger
int echoPin = 10;   // Echo
long duration, cm;

void setup() {
  //Serial Port begin
  Serial.begin (9600);
  //Define inputs and outputs
  pinMode(trigPin, OUTPUT);
  pinMode(echoPin, INPUT);
}

void loop() {
  digitalWrite(trigPin, LOW);
  delayMicroseconds(5);
  digitalWrite(trigPin, HIGH);
  delayMicroseconds(10);
  digitalWrite(trigPin, LOW);

  pinMode(echoPin, INPUT);
  duration = pulseIn(echoPin, HIGH);

  // Convert the time into a distance
  cm = (duration/2) / 29.2;
  if(cm<100)
  {
    Serial.print("CM :alert ");
  }
}
```

```

Serial.println(cm);
}

// Divide by 29.1 or multiply by 0.0343

delay(1000);
}

```

