

## ASSIGNMENT – 4

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

### Code:

```
Const int TRIG_PIN=7;

Const int ECHO_PIN=8;

Const unsigned int MAX-DIST=23200;

Void setup(){

Pin Mode(TRIG-PIN,OUTPUT);

Digital Write(TRIG-PIN,LOW);

pinMode(ECHO_PIN,INPUT);

Serial.begin(9600);

}

Void loop(){

Unsigned long t1;

Unsigned long t2;

Unsigned long pulse_width;

float cm;

float inches;

digitalWrite(TRIG_PIN,HIGH);

delayMicroseconds(10);

digitalWrite(TRIG_PIN,LOW);

While(digitalRead(ECHO_PIN)==0);

t1=micros();
```

```
While(digitalRead(ECHO_PIN)==1);
```

```
t2=micros();
```

```
pulse_width=t2-t1;
```

```
cm=pulse_Width/58;
```

```
inches=pulse_width/148.0;
```

```
if(cm<100){
```

```
Serial.println("Alert!!");
```

```
}
```

```
}
```

```
Serial.print("*****");
```

```
}
```

```
Delay(1000);
```

```
}
```

