**Assignment-4**

# Question:

Writecodeandconnectionsinwokwifortheultrasonicsensor.

Wheneverthedistanceislessthan100cmssendan"alert"totheIBMcloudanddisplayinthe devicerecentevents.

# Code:

#definetrigPin12

#defineechoPin13

intBuzzer=8;//Connectbuzzerpinto8intledPin=6;//ConnectLEdpinto6

intduration,distance;//tomeasurethedistanceandtimetaken

voidsetup(){

Serial.begin(9600);

//Definetheoutputandinputobjects(devices)pinMode(trigPin,OUTPUT);pinMode(echoPin, INPUT);pinMode(Buzzer, OUTPUT);pinMode(ledPin,OUTPUT);

}

voidloop(){

digitalWrite(trigPin,HIGH);delayMicroseconds(10);digitalWrite(trigPin, LOW);duration=pulseIn(echoPin,HIGH);distance=(duration/2)/29.1;

//whendistanceisgreaterthanorequalto200ORlessthanorequalto0,thebuzzerandLEDareoff

if(distance>=200||distance<=0)

{

Serial.println("noobjectdetected");digitalWrite(Buzzer,LOW);

digitalWrite(ledPin,LOW);

}

else{

Serial.println("objectdetected\n");Serial.print("distance=");

Serial.print(distance); //printsthedistanceifitisbetweentherange0to200tone(Buzzer,400); //playtoneof400Hzfor500msdigitalWrite(ledPin,HIGH);

}

}

# Screenshot (4).pngOutput: