ASSINGMENT-4

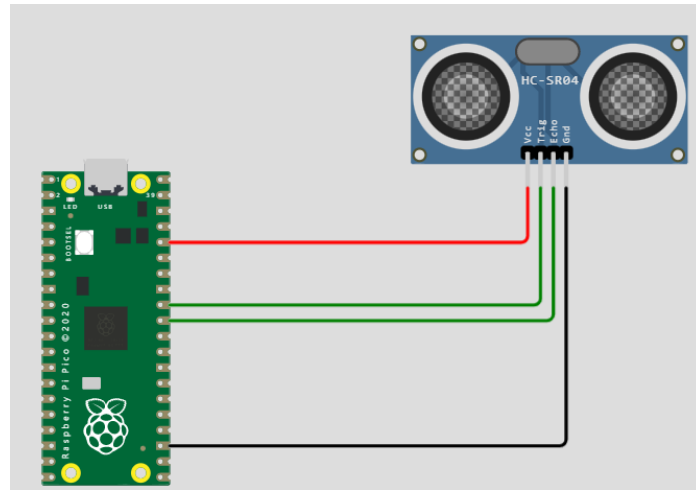| Date	01 November 2022
Team ID	PNT2022TMID08042
Project Name	Project - Signs with Smart Connectivity for Better Road Safety

Question:

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

Program:

```python
from machine import Pin
import utime
trigger = Pin(27, Pin.OUT)
echo = Pin(26, Pin.IN)
def ultra():
    trigger.low()
    utime.sleep_us(2)
    trigger.high()
    utime.sleep_us(5)
    trigger.low()
    while echo.value() == 0:
        signaloff = utime.ticks_us()
    while echo.value() == 1:
        signalon = utime.ticks_us()
    timepassed = signalon - signaloff
    distance = (timepassed * 0.0343) / 2
    if(distance <=100):
        print("alert")
    else:
        print("The distance from object is ",distance,"cm")
while True:
    ultra()
    utime.sleep(1)
```

Circuit Diagram:

Output: