Smart water fountain

Program:

import machine

import time

TRIGGER\_PIN = 23

ECHO\_PIN = 22

LEAK\_LED\_PIN = 19

trigger = machine.Pin(TRIGGER\_PIN, machine.Pin.OUT)

echo = machine.Pin(ECHO\_PIN, machine.Pin.IN)

leak\_led = machine.Pin(LEAK\_LED\_PIN, machine.Pin.OUT)

def measure\_distance():

    trigger.value(0)

    time.sleep\_us(5)

    trigger.value(1)

    time.sleep\_us(10)

    trigger.value(0)

    pulse\_start = pulse\_end = 0

    while echo.value() == 0:

        pulse\_start = time.ticks\_us()

    while echo.value() == 1:

        pulse\_end = time.ticks\_us()

    pulse\_duration = pulse\_end - pulse\_start

    distance = (pulse\_duration \* 0.0343) / 2

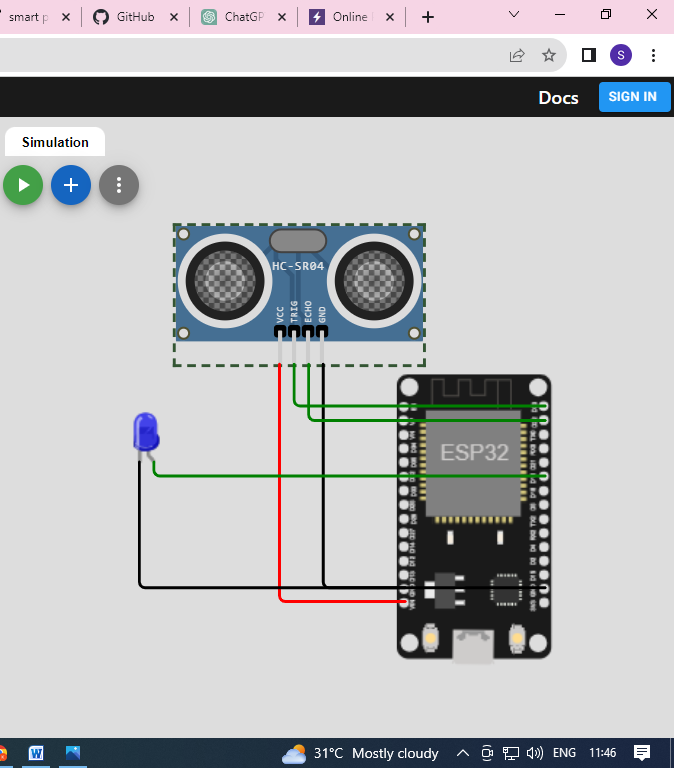
    return distance

def check\_for\_leak():

    distance = measure\_distance()

    threshold\_distance = 10

Sensors :



Output :

