Assignment 2:

Build a python code, Assume you get temperature and humidity values (generated with random function to a variable) and write a condition to continuously detect alarm in case of high temperature.

import requests

import json

a="https://api.openweathermap.org/data/2.5/weather?q=[Tirupati, IN](https://openweathermap.org/city/1254360)&appid=45347ffbdf7dcca7d232ee27dd53473c"

r=requests.get (url=a)

data=r.json()

tem=data['main']['temp']

humidity=data['main']['humidity']

#Libraries

import RPi.GPIO as GPIO

from time import sleep

#Disable warnings (optional)

GPIO.setwarnings(False)

#Select GPIO mode

GPIO.setmode(GPIO.BCM)

#Set buzzer - pin 29 as output

buzzer=29

GPIO.setup(buzzer,GPIO.OUT)

#Run forever loop

while True:

if(tem>=200 and humidity>=50):

GPIO.output(buzzer,GPIO.HIGH)

print ("Beep")

sleep(0.10) # Delay in seconds

else:

GPIO.output(buzzer,GPIO.LOW)

print ("No Beep")

sleep(0.10)