

```

'GENERACION DEL VECTOR METEOROLOGICO'
""

#Importar Librerias
import pigpio
import DHT22
import Adafruit_BMP.BMP085 as BMP085
import time
import smbus
from time import sleep

#Configuraciones iniciales
pi= pigpio.pi()
dht22 = DHT22.sensor(pi,4)
dht22.trigger()
bmp = BMP085.BMP085()

#Tiempo de muestreo
sleepTime = 20

"Definir Funciones"
def readDHT22():#Lectura del DHT22
    dht22.trigger()
    humidity = dht22.humidity()
    temp = dht22.temperature()
    return (humidity, temp)
def readBMP180():#Lectura del BMP180
    temper = bmp.read_temperature()
    pressure = bmp.read_pressure()
    return (temper, pressure)

"FUNCION PRINCIPAL"

#Inicio del proceso iterativo
while True:
    #Inicializar variables
    i=0
    promhum=0
    promtem=0
    #Proceso iterativo for
    for i in range (3):#Numero de iteraciones=3
        sleep(sleepTime)#Ejecutar retardo
        #Llamado a las funciones de lectura
        humidity, temp = readDHT22()
        temper, pressure = readBMP180()
        #Promediar valores de temperatura
        tmed=(temp+temper)/2
        #Guardar datos en variables
        promhum=promhum+humidity
        promtem=promtem+tmed
        #Incrementar variable para iteracion
        i=i+1

```

```
#Crear vector meteorologico
meteoros=['Temp: %.2f [C]'%(promtem/3),'Hum: %.2f [%%]'
          %(promhum/3),'Press: %.2f [hPa]'%(pressure/100)]
#Imprimir vector meteorologico
print meteoros
print (" ")
print (" ")

#VOLVER AL CICLO WHILE
```