Assignment-2

Python programming

Assignment Date	28-9-2022
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Maximum Marks	2 marks

Question:

Build a python code,assume u get temperature and humidity value with condition

Solution:

Program:

```
import tkinter as tk
import numpy as np
import random
import time
import datetime
import threading
import Adafruit_DHT
pin=4
sensor = Adafruit_DHT.DHT22
def tick():
   time2=time.strftime('%H:%M:%S')
   clock.config(text=time2)
   clock.after(200,tick)
def get_data():
   threading.Timer(5,get_data).start()
   humidity,temperature = Adafruit_DHT.read_retry(sensor,pin)
   if humdidity is not and temperature is not none:
      print('Temp={0:0.1f}*c Humidity={1:0.1f}%'.format(temperture,humidity))
      1_display.config(text = temperature)
      else:
         print('Failed to get reading. Try again!')
         return temperature
```

```
main window = tk.Tk.()
mainwindow.geometry('640x340')
mainwindow.title("sensor Date Live Feed")
clock=tk.Label(mainwindow,font=("Arial",30),bg='green',fg="white")
clock.grid(row=0,column=0,padx=10,pady=10,sticky="nsew")
1_m=tk.Label(mainwindow,text="Sensor Data",font=("Arial",30),fg="Black"
```

Output:

```
Temp=25.6°C   Humidity=26.8%
Temp=25.1°C   Humidity=25.2%
Temp=25.1°C   Humidity=25.2%
Temp=25.1°C   Humidity=26.5%
Temp=25.1°C   Humidity=28.2%
Temp=25.4°C   Humidity=43.7%
Temp=25.7°C   Humidity=41.8%
Temp=25.7°C   Humidity=37.5%
Temp=25.7°C   Humidity=35.8%
>>> Temp=25.8°C   Humidity=32.5%
```

Temperature increases or decreases as per the climate chenges