

## ASSIGNMENT-2

### PYTHON PROGRAMMING

Assignment Date	01 October 2022
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Student Roll Num	2019pitcs139
Maximum Mark	2 Marks

### QUESTION -1

**Build a python code, Assume u 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.**

### PYTHON PROGRAM

```
import requests
#import os
from datetime import datetime

api_key = '4485e56ab6de9a91047e8fbeed6a7902'
location = input("Enter the city name: ")

complete_api_link =
"https://api.openweathermap.org/data/2.5/weather?q="+location+"&appid="+api_k
ey
api_link = requests.get(complete_api_link)
api_data = api_link.json()

#create variables to store and display data
temp_city = ((api_data['main']['temp']) - 273.15)
weather_desc = api_data['weather'][0]['description']
hmdt = api_data['main']['humidity']
wind_spd = api_data['wind']['speed']
date_time = datetime.now().strftime("%d %b %Y | %I:%M:%S %p")

print ("-----")
print ("Weather Stats for - {} || {}".format(location.upper(), date_time))
print ("-----")
print ("Current temperature is: {:.2f} deg C".format(temp_city))
print ("Current weather desc  :",weather_desc)
print ("Current Humidity      :",hmdt, '%')
print ("Current wind speed      :",wind_spd , 'kmph')
print ("=====")

# making a list so that i can print the info to a txt
txtlist = [temp_city,weather_desc,hmdt,wind_spd,date_time]
#using open() buit-in function to write to a text file
with open("textfile.txt" , mode= 'w' ,encoding= 'utf-8') as f :
```

In [39]:

```

#encoding = utf-8 for linux and cp1252 for win
    f.write("----- \n
")
    f.write("Weather Stats for - {} || {}".format(location.upper(),
date_time))
    f.write("\n -----
\n")
    f.write("Current temperature is: {:.2f} deg C\n".format(txtlist[0]))

    f.write("{} {} \n".format("Current weather desc :",txtlist[1]))
    f.write("{} {} {} \n".format("Current Humidity :",txtlist[2],"%"))
    f.write("{} {} {} \n".format("Current wind speed
:",txtlist[3],"kmph"))
    f.write("=====")

```

## **OUTPUT**

Enter the city name: Gudiyatham

-----  
Weather Stats for - Gudiyatham 05-10-2022  
-----

Current temperature is: 30.99 deg C  
Current weather desc : mist  
Current Humidity : 74 %  
Current wind speed : 2.57 kmph