

## ASSIGNMENT 2

### CODE:

```
import random

import time

import winsound

while(1):

    temp = random.randint(0,100)

    humidity = random.randint(0,100)

    if temp>50:

        print("ALERT!! Detected temperature: "+str(temp)+"c")

        duration=5000

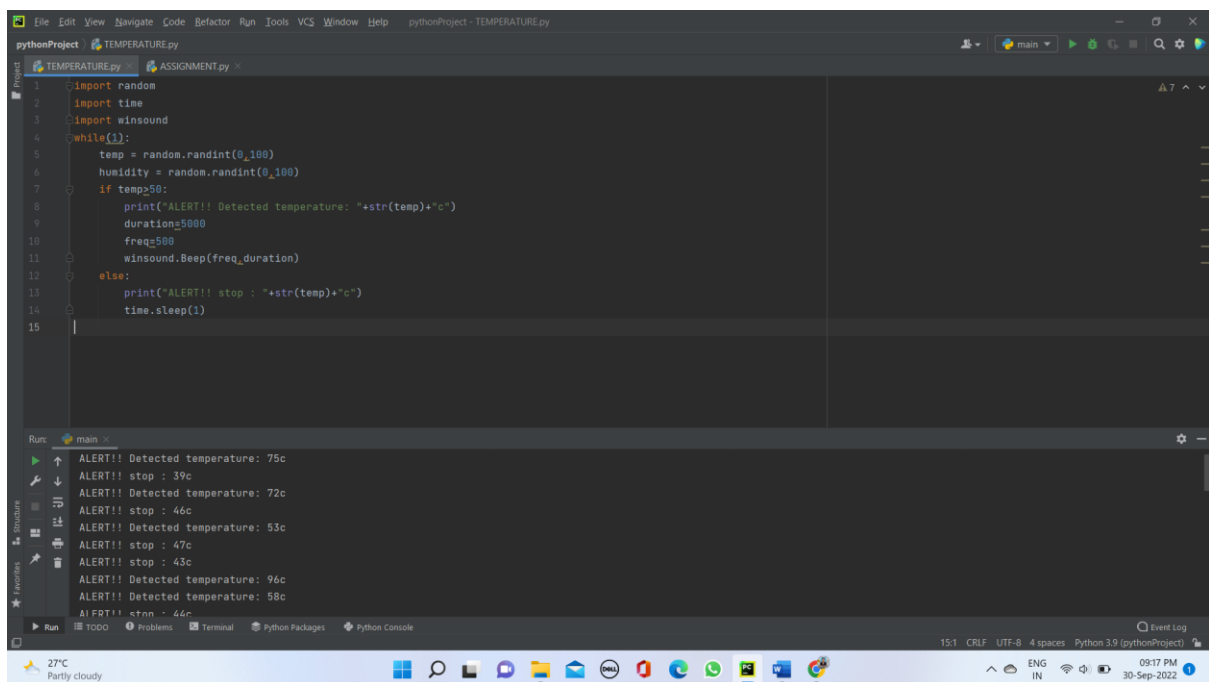
        freq=500

        winsound.Beep(freq,duration)

    else:

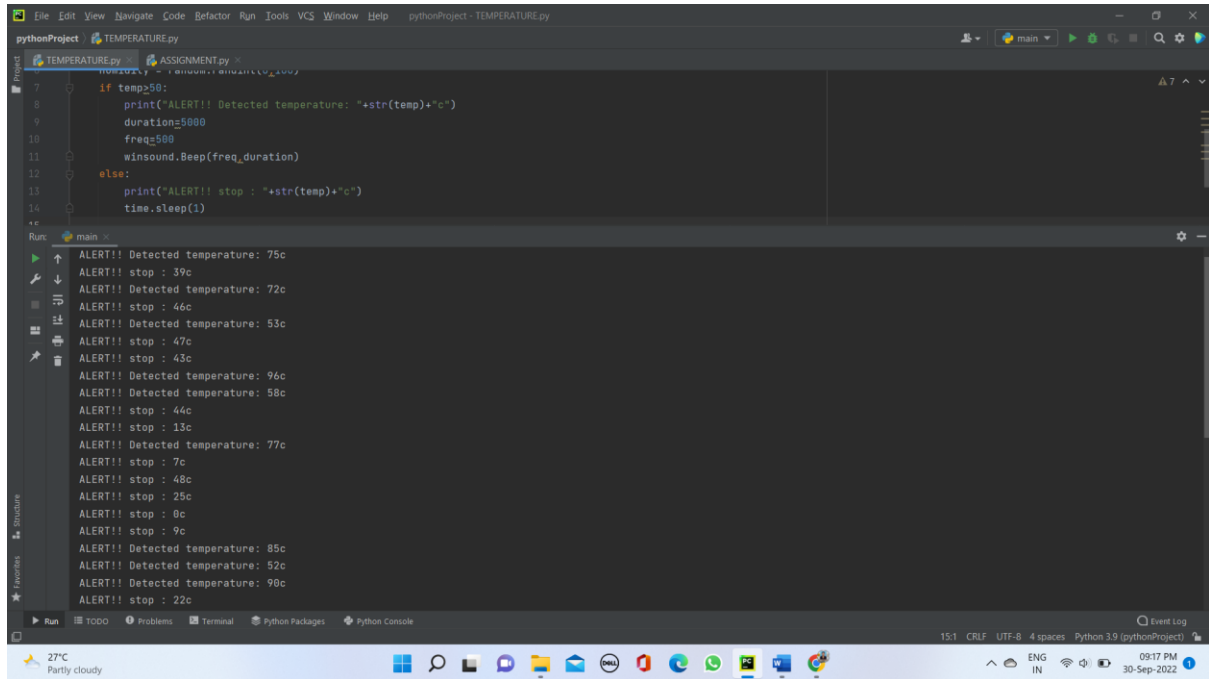
        print("ALERT!! stop : "+str(temp)+"c")

        time.sleep(1)
```



The screenshot displays a Python IDE window titled 'pythonProject - TEMPERATURE.py'. The code editor shows the same Python script as provided in the previous block. Below the editor, the 'Run' console is active, showing the output of the program. The output consists of alternating alert messages: 'ALERT!! Detected temperature: 75c', 'ALERT!! stop : 39c', 'ALERT!! Detected temperature: 72c', 'ALERT!! stop : 46c', 'ALERT!! Detected temperature: 53c', 'ALERT!! stop : 47c', 'ALERT!! stop : 43c', 'ALERT!! Detected temperature: 96c', and 'ALERT!! Detected temperature: 58c'. The IDE interface includes a sidebar with 'Project' and 'Run' views, and a status bar at the bottom showing system information like '27°C Partly cloudy' and the date '30-Sep-2022'.

## OUTPUT:



The screenshot displays a Python IDE with a project named 'pythonProject'. The main file, 'TEMPERATURE.py', contains a script that monitors temperature. The code is as follows:

```
1 import random
2 import time
3
4 def detect_temp():
5     temp = random.randint(0, 100)
6     return temp
7
8 if temp > 50:
9     print("ALERT!! Detected temperature: "+str(temp)+"c")
10    duration=5000
11    freq=500
12    winsound.Beep(freq,duration)
13
14 else:
15     print("ALERT!! stop : "+str(temp)+"c")
16     time.sleep(1)
```

The 'Run' console shows the output of the script, which consists of alternating alerts and stop messages with temperature readings in Celsius. The output is as follows:

```
ALERT!! Detected temperature: 75c
ALERT!! stop : 39c
ALERT!! Detected temperature: 72c
ALERT!! stop : 46c
ALERT!! Detected temperature: 53c
ALERT!! stop : 47c
ALERT!! stop : 43c
ALERT!! Detected temperature: 96c
ALERT!! Detected temperature: 58c
ALERT!! stop : 44c
ALERT!! stop : 13c
ALERT!! Detected temperature: 77c
ALERT!! stop : 7c
ALERT!! stop : 48c
ALERT!! stop : 25c
ALERT!! stop : 0c
ALERT!! stop : 9c
ALERT!! Detected temperature: 85c
ALERT!! Detected temperature: 52c
ALERT!! Detected temperature: 90c
ALERT!! stop : 22c
```

The IDE interface includes a menu bar (File, Edit, View, Navigate, Code, Refactor, Run, Tools, VCS, Window, Help), a toolbar with icons for running and debugging, and a status bar at the bottom showing the current file encoding (UTF-8), line length (15:1), and the current time (09:17 PM, 30-Sep-2022).