

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")

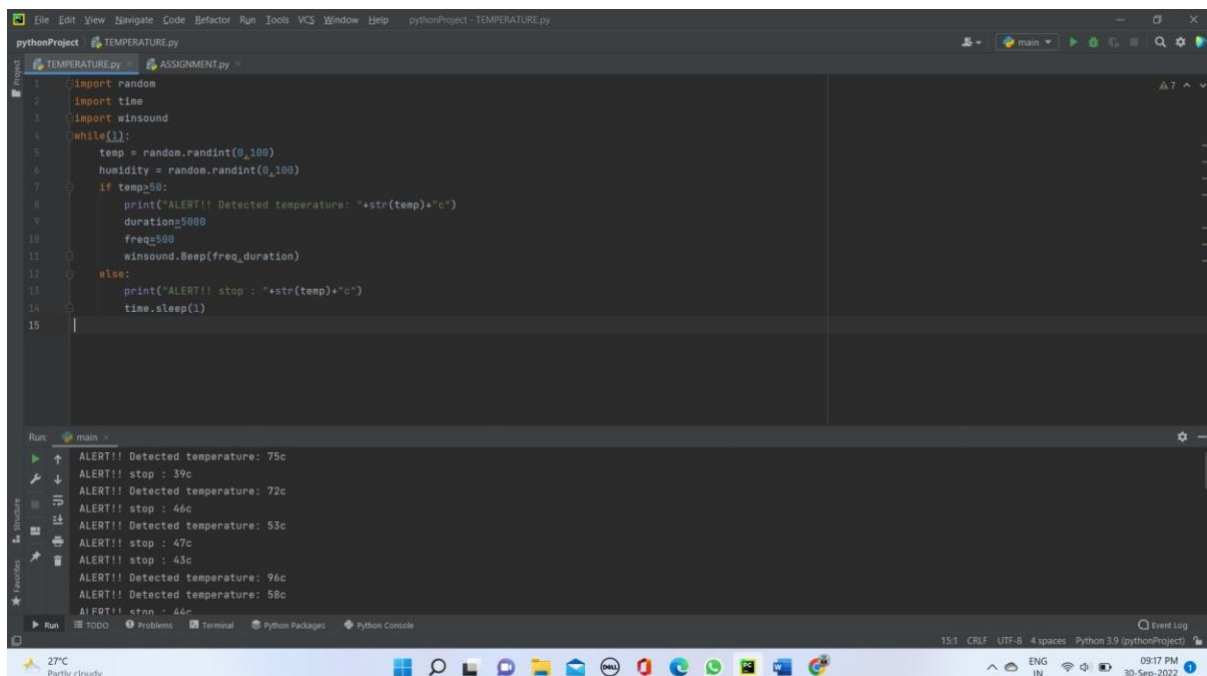
        duration=5000    freq=500

        winsound.Beep(freq,duration)

    else:

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

    time.sleep(1)
```



The screenshot shows a Python IDE with a dark theme. The editor window displays the code from the previous block. The Run window at the bottom shows the output of the program, which consists of alternating alerts for high temperature and stop messages for lower temperatures. 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
```

The IDE interface includes a menu bar at the top, a sidebar on the left with icons for Explorer, Search, and Run and Debug, and a status bar at the bottom showing system information like temperature (27°C) and time (09:17 PM).

OUTPUT:

The screenshot shows a Python IDE window titled "pythonProject - TEMPERATURE.py". The editor displays a script for monitoring temperature. The script uses an if-else loop to check if the temperature is above 50 degrees Celsius. If it is, it prints an alert, sets a duration of 5000, a frequency of 500, and uses winsound.Beep to create an alert sound. If the temperature is 50 degrees or below, it prints a stop alert and sleeps for 1 second. The Run window shows the output of the script, displaying a series of alerts and stop messages with corresponding temperature readings.

```
pythonProject - TEMPERATURE.py
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8 if temp>50:
9     print("ALERT!! Detected temperature: "+str(temp)+"c")
10    duration=5000
11    freq=500
12    winsound.Beep(freq,duration)
13 else:
14     print("ALERT!! stop : "+str(temp)+"c")
15     time.sleep(1)
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```

Run: main x

```
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
```

15:1 CRLF UTF-8 4 spaces Python 3.9 (pythonProject) 09:17 PM 30-Sep-2022