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Subject: Professional Readiness for Innovation, Employability & Entrepreneurship (Nalaiya Thiran)

Assignment – 2 Python Program

Task – 1:

Write a python code to get a threshold temperature form the User and generate a random temperature and check whether the random temperature is greater or smaller than or equal to threshold value

Solution:

Program:

```
import random
threshold = int(input("Enter Temperature Threshold value(Range 0,40):"))
a=1
while(a==1):
    randvalue=random.randint(0,40)
    print("Randomly generated Temperature: ",randvalue)
    if randvalue>threshold:
        print(randvalue,"higher than",threshold,"(Threshold value)")
    elif threshold>randvalue:
        print(randvalue,"less than",threshold,"(Threshold value)")
    else:
        print(randvalue,"equals to",threshold,"(Threshold value)")
    a=int(input("Enter 1 to generate another number:"))
```

Output:

PROBLEMS OUTPUT TERMINAL JUPYTER DEBUG CONSOLE

```
PS D:\daily-coding-practise-main\Others> py Temperature.py
Enter Temperature Threshold value(Range 0,40):25
Randomly generated Temperature: 13
13 less than 25 (Threshold value)
Enter 1 to generate another number:1
Randomly generated Temperature: 2
2 less than 25 (Threshold value)
Enter 1 to generate another number:1
Randomly generated Temperature: 29
29 higher than 25 (Threshold value)
Enter 1 to generate another number:2
PS D:\daily-coding-practise-main\Others> █
```

Explanation of Program:

Initially, we have imported the random to generate the random value. Then, we used input function with int function to get an integer input value from the user for Threshold Temperature then we initialized a=1 and started the while loop for the iterative operation of the following lines.

Then, we used random.randint function with (0,40) as parameter to generate a random temperature and stored it in randvalue. Then, we used if-condition to check whether randvalue is greater than threshold. if yes, print higher temperature. If no, we used elif-condition to whether randvalue is smaller than threshold. if yes print low temperature. Else, print equal temperature.

Finally, we used input function with int function to get an integer value to know whether the user wants to generate another value or not. If Input is 1, then we repeated the above procedure, else Terminate the program Execution.