

Assignment -2

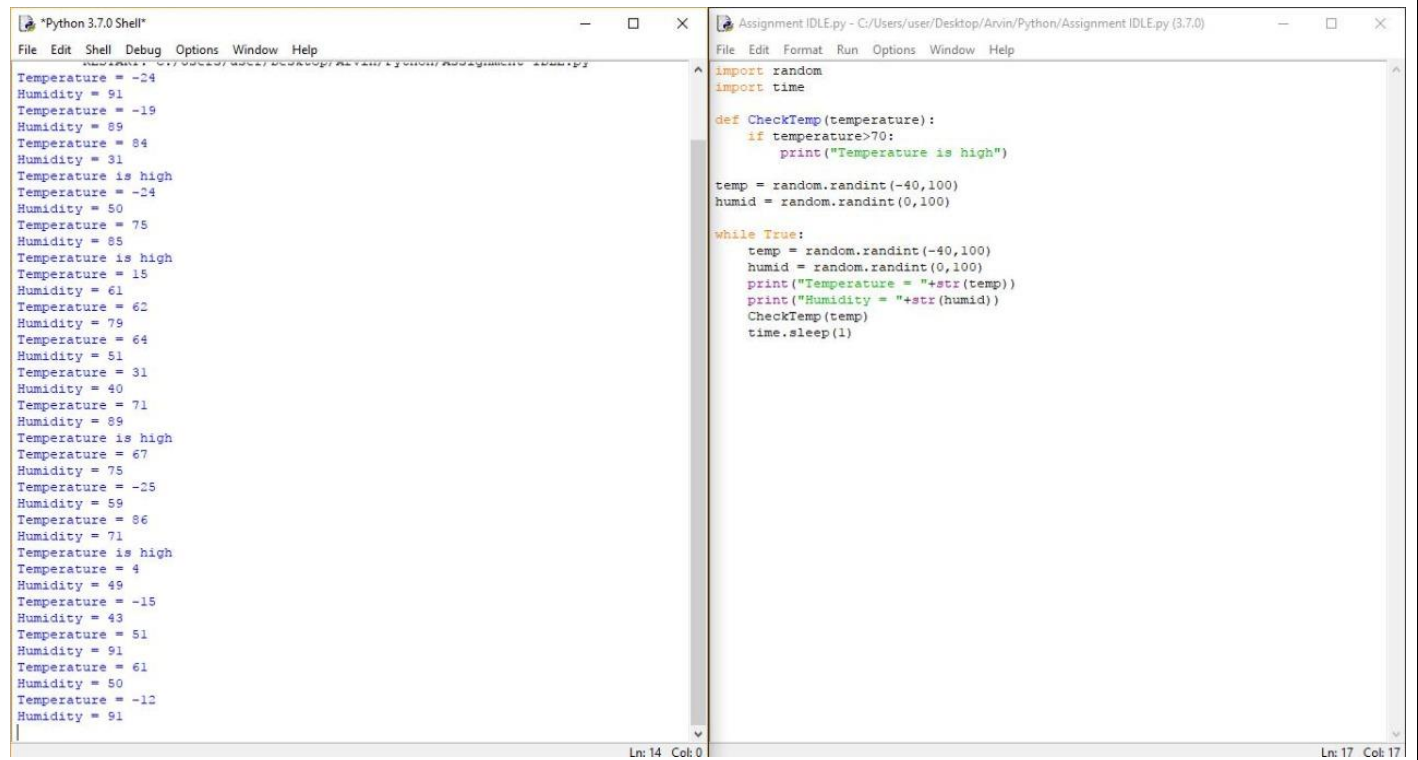
Assignment Date	21 September 2022
Student Name	Devakumar M.
Student Roll Number	611219106004
Maximum Marks	2 Marks

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.

Solution:

```
import random
import time
def CheckTemp(temperature):
    if temperature>70:
        print("Temperature is high")
    temp = random.randint(-40,100)
    humid = random.randint(0,100)
    while True:
        temp = random.randint(-40,100)
        humid = random.randint(0,100)
        print("Temperature = "+str(temp))
        print("Humidity = "+str(humid))
    CheckTemp(temp)
    time.sleep(1)
```

Circuit :



The image shows two windows from a Python 3.7.0 environment. The left window, titled "Python 3.7.0 Shell", displays the output of a script, showing alternating lines of temperature and humidity values, with some temperature values marked as "high". The right window, titled "Assignment IDLE.py", shows the source code of the script. The code imports the 'random' and 'time' modules, defines a 'CheckTemp' function that prints a message if the temperature is above 70, and then enters a 'while True' loop that generates random temperature and humidity values, prints them, calls 'CheckTemp', and sleeps for 1 second.

```
Python 3.7.0 Shell
File Edit Shell Debug Options Window Help
C:\Users\user\Desktop\Arvin\Python\Assignment IDLE.py
Temperature = -24
Humidity = 91
Temperature = -19
Humidity = 89
Temperature = 84
Humidity = 31
Temperature is high
Temperature = -24
Humidity = 50
Temperature = 75
Humidity = 85
Temperature is high
Temperature = 15
Humidity = 61
Temperature = 62
Humidity = 79
Temperature = 64
Humidity = 51
Temperature = 31
Humidity = 40
Temperature = 71
Humidity = 89
Temperature is high
Temperature = 67
Humidity = 75
Temperature = -25
Humidity = 59
Temperature = 86
Humidity = 71
Temperature is high
Temperature = 4
Humidity = 49
Temperature = -15
Humidity = 43
Temperature = 51
Humidity = 91
Temperature = 61
Humidity = 50
Temperature = -12
Humidity = 91
Ln: 14 Col: 0

Assignment IDLE.py - C:/Users/user/Desktop/Arvin/Python/Assignment IDLE.py (3.7.0)
File Edit Format Run Options Window Help
import random
import time

def CheckTemp(temperature):
    if temperature>70:
        print("Temperature is high")

temp = random.randint(-40,100)
humid = random.randint(0,100)

while True:
    temp = random.randint(-40,100)
    humid = random.randint(0,100)
    print("Temperature = "+str(temp))
    print("Humidity = "+str(humid))
    CheckTemp(temp)
    time.sleep(1)
Ln: 17 Col: 17
```