

## Assignment – 2

### Python programming

|                     |                   |
|---------------------|-------------------|
| Assignment Date     | 27 September 2022 |
| Student Name        | Kavinkumar K      |
| Student Roll Number | 910019106019      |
| 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
```

```
while(1):
```

```
    temp=random.randint(10,200)
```

```
    humidity=random.randint(10,200)
```

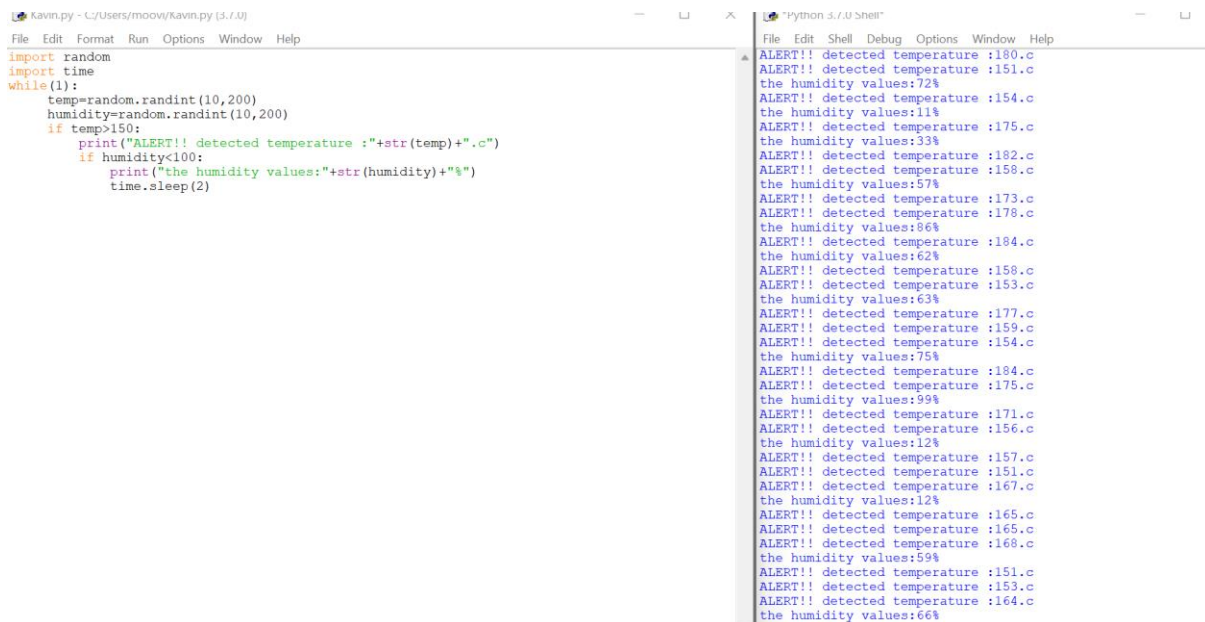
```
    if temp>150:
```

```
        print("ALERT!! detected temperature :"+str(temp)+".c")
```

```
    if humidity<100:
```

```
        print("the humidity values:"+str(humidity)+"%")
```

```
        time.sleep(2)
```



The screenshot shows a Python IDE with two windows. The left window, titled 'Kavin.py', contains the Python code for the solution. The right window, titled 'Python 3.7.0 Shell', shows the output of the code. The code is a while loop that generates random temperature and humidity values. If the temperature is greater than 150, it prints an alert message. If the humidity is less than 100, it prints the humidity value and sleeps for 2 seconds. The output shows a series of alert messages and humidity values.

```
File Edit Format Run Options Window Help
import random
import time
while(1):
    temp=random.randint(10,200)
    humidity=random.randint(10,200)
    if temp>150:
        print("ALERT!! detected temperature :"+str(temp)+".c")
    if humidity<100:
        print("the humidity values:"+str(humidity)+"%")
        time.sleep(2)
```

```
File Edit Shell Debug Options Window Help
ALERT!! detected temperature :180.c
ALERT!! detected temperature :151.c
the humidity values:72%
ALERT!! detected temperature :154.c
the humidity values:11%
ALERT!! detected temperature :175.c
the humidity values:33%
ALERT!! detected temperature :182.c
ALERT!! detected temperature :158.c
the humidity values:57%
ALERT!! detected temperature :173.c
ALERT!! detected temperature :178.c
the humidity values:86%
ALERT!! detected temperature :184.c
the humidity values:62%
ALERT!! detected temperature :158.c
ALERT!! detected temperature :153.c
the humidity values:63%
ALERT!! detected temperature :177.c
ALERT!! detected temperature :159.c
ALERT!! detected temperature :154.c
the humidity values:75%
ALERT!! detected temperature :184.c
ALERT!! detected temperature :175.c
the humidity values:99%
ALERT!! detected temperature :171.c
ALERT!! detected temperature :156.c
the humidity values:12%
ALERT!! detected temperature :157.c
ALERT!! detected temperature :151.c
ALERT!! detected temperature :167.c
the humidity values:12%
ALERT!! detected temperature :165.c
ALERT!! detected temperature :165.c
ALERT!! detected temperature :168.c
the humidity values:59%
ALERT!! detected temperature :151.c
ALERT!! detected temperature :153.c
ALERT!! detected temperature :164.c
the humidity values:66%
```