

Assignment -2
Python Programming

Assignment Date	21 September 2022
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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(0,200)
```

```
    humidity=random.randint(0,200)
```

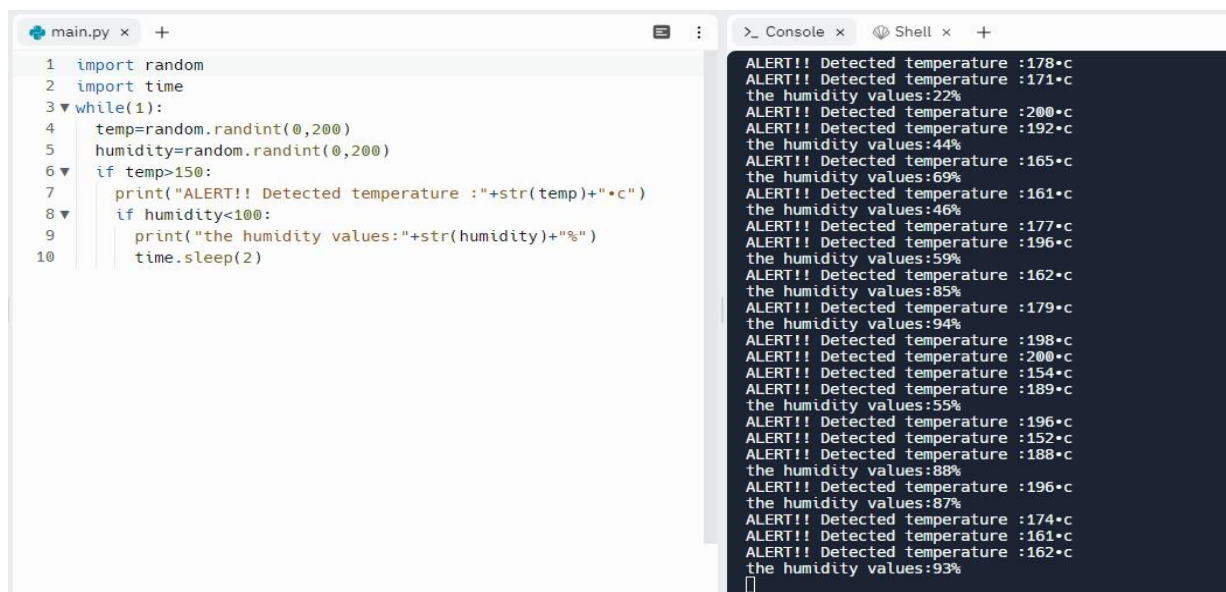
```
    if temp>150:
```

```
        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 a file named 'main.py' and a console window. The code in 'main.py' is as follows:

```
1 import random
2 import time
3 while(1):
4     temp=random.randint(0,200)
5     humidity=random.randint(0,200)
6     if temp>150:
7         print("ALERT!! Detected temperature :"+str(temp)+"°c")
8     if humidity<100:
9         print("the humidity values:"+str(humidity)+"%")
10        time.sleep(2)
```

The console window displays the output of the program, showing multiple instances of the alert messages:

```
ALERT!! Detected temperature :178°c
ALERT!! Detected temperature :171°c
the humidity values:22%
ALERT!! Detected temperature :200°c
ALERT!! Detected temperature :192°c
the humidity values:44%
ALERT!! Detected temperature :165°c
the humidity values:69%
ALERT!! Detected temperature :161°c
the humidity values:46%
ALERT!! Detected temperature :177°c
ALERT!! Detected temperature :196°c
the humidity values:59%
ALERT!! Detected temperature :162°c
the humidity values:85%
ALERT!! Detected temperature :179°c
the humidity values:94%
ALERT!! Detected temperature :198°c
ALERT!! Detected temperature :200°c
ALERT!! Detected temperature :154°c
ALERT!! Detected temperature :189°c
the humidity values:55%
ALERT!! Detected temperature :196°c
ALERT!! Detected temperature :152°c
ALERT!! Detected temperature :188°c
the humidity values:88%
ALERT!! Detected temperature :196°c
the humidity values:87%
ALERT!! Detected temperature :174°c
ALERT!! Detected temperature :161°c
ALERT!! Detected temperature :162°c
the humidity values:93%
```