

BANNARI AMMAN INSTITUTE OF TECHNOLOGY,
SATHYAMANGALAM

Department of Computer Science and Engineering

IOT Assignment

Topic : Assignment on temperature and humidity sensing and
alarm automation using python

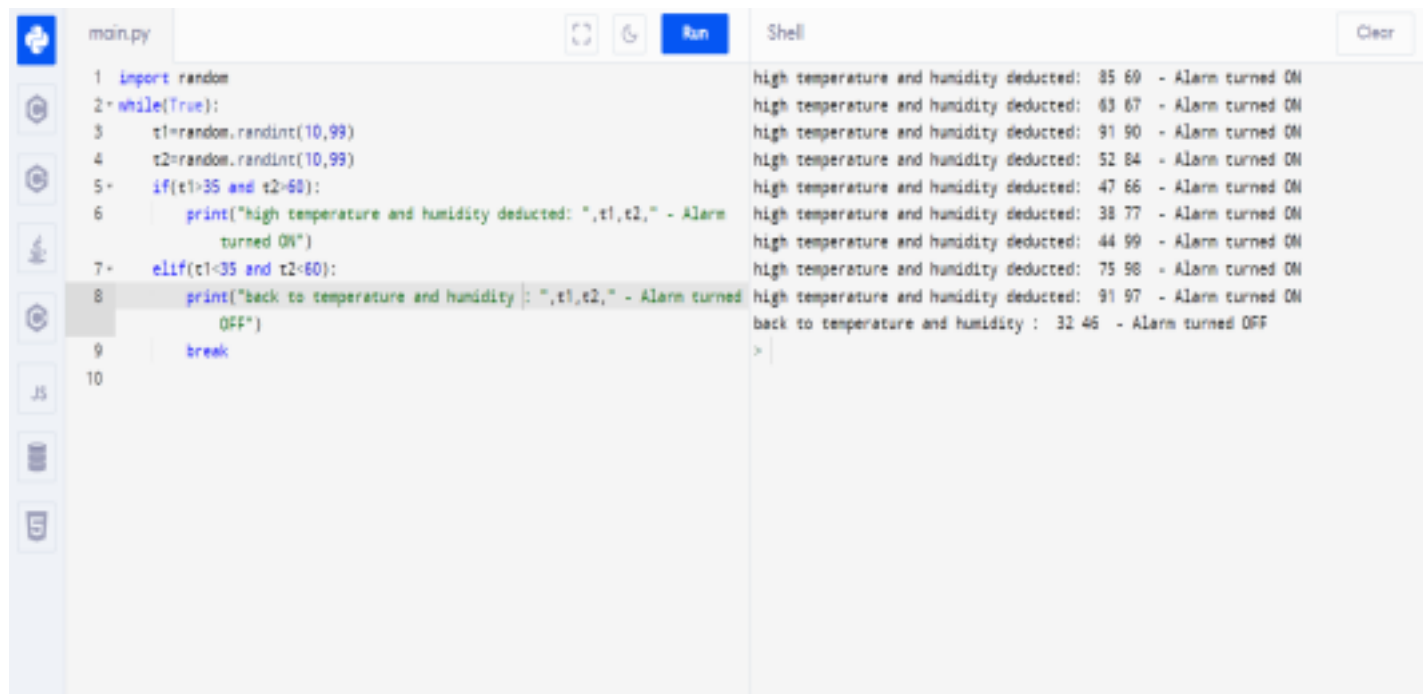
Name: Abhi Nivesh L

Code:-

```
import random
while(True):
    t1=random.randint(10,99)
    t2=random.randint(10,99)
    if(t1>35 and t2>60):
        print("high temperature and humidity deducted: ",t1,t2," - Alarm turned ON")
    elif(t1<35 and t2<60):
```

```
print("back to temperature and humidity : ",t1,t2," - Alarm turned OFF")
break
```

OUTPUT:



The screenshot shows a Python IDE with a file named 'main.py' and a 'Shell' window. The script in 'main.py' is a loop that generates random temperature (t1) and humidity (t2) values. If both are above 35, it prints 'high temperature and humidity deducted: ', t1, t2, ' - Alarm turned ON'. If both are below 60, it prints 'back to temperature and humidity : ', t1, t2, ' - Alarm turned OFF' and breaks the loop. The 'Shell' window shows the output of the script, displaying several instances of the 'Alarm turned ON' message followed by the 'Alarm turned OFF' message and a break statement.

```
main.py  Run  Clear
```

```
1 import random
2 while(True):
3     t1=random.randint(10,99)
4     t2=random.randint(10,99)
5     if(t1>35 and t2>60):
6         print("high temperature and humidity deducted: ",t1,t2," - Alarm
          turned ON")
7     elif(t1<35 and t2<60):
8         print("back to temperature and humidity : ",t1,t2," - Alarm turned
          OFF")
9         break
10
```

```
high temperature and humidity deducted: 85 69 - Alarm turned ON
high temperature and humidity deducted: 63 67 - Alarm turned ON
high temperature and humidity deducted: 91 90 - Alarm turned ON
high temperature and humidity deducted: 52 84 - Alarm turned ON
high temperature and humidity deducted: 47 66 - Alarm turned ON
high temperature and humidity deducted: 38 77 - Alarm turned ON
high temperature and humidity deducted: 44 99 - Alarm turned ON
high temperature and humidity deducted: 75 98 - Alarm turned ON
high temperature and humidity deducted: 91 97 - Alarm turned ON
back to temperature and humidity : 32 46 - Alarm turned OFF
>
```