

DMI ENGINEERING COLLEGE

ARALVOIMOZHI

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

IBM NALAIYA THIRAN

ASSIGNMENT-2

TEAM LEADER: MUTHULEKSHMI P

TEAM MEMBER: VINI SHALINI M

SARAL N

ANNS A

BUILD A PYTHON CODE ,ASSUME U GET TEMPERATURE AND HUMIDITY VALUES AND WRITE A CONDITION TO CONTINUOUSLY DETECT ALARM IN CASE OF HIGH TEMPERATURE

PROGRAM:

```
#from machine import Pin
import random
import time
import sleep
#btn=Pin(4,Pin.IN) while
True:

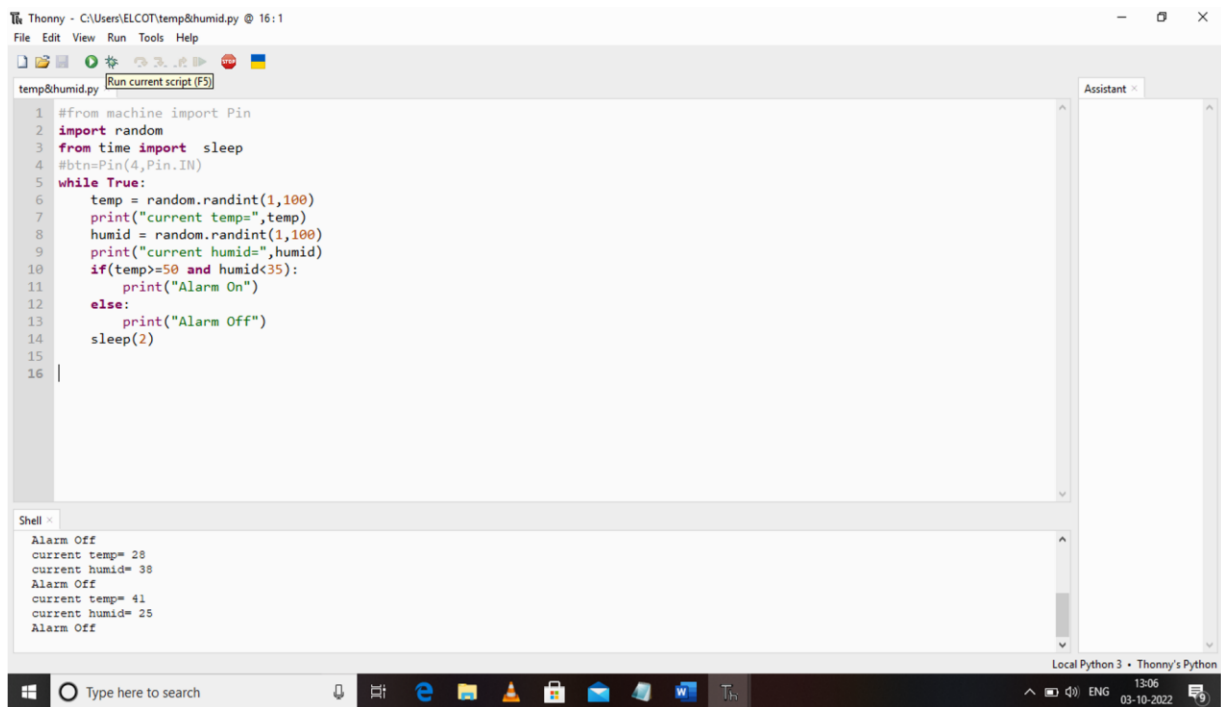
    temp = random.randint(1,100)
    print("current temp=",temp)    humid
    = random.randint(1,100)
    print("current humid=",humid)
    if(temp>=50 and humid<35):

        print("Alarm On")
    else:
```

```
print("Alarm Off")
```

```
sleep(2)
```

OUTPUT :



The screenshot shows the Thonny Python IDE interface. The main editor window displays a Python script named 'temp&humid.py'. The script imports 'Pin' from 'machine', 'random' from 'random', and 'sleep' from 'time'. It sets a button pin (4) to input mode and enters a 'while True' loop. Inside the loop, it generates random temperature and humidity values (1-100), prints them, and checks if temperature is greater than 50 and humidity is less than 35. If true, it prints 'Alarm On'; otherwise, it prints 'Alarm Off' and sleeps for 2 seconds.

```
1 #from machine import Pin
2 import random
3 from time import sleep
4 #btn=Pin(4,Pin.IN)
5 while True:
6     temp = random.randint(1,100)
7     print("current temp=",temp)
8     humid = random.randint(1,100)
9     print("current humid=",humid)
10    if(temp>50 and humid<35):
11        print("Alarm On")
12    else:
13        print("Alarm Off")
14    sleep(2)
15
16
```

The Shell window at the bottom shows the output of the script's execution:

```
Alarm Off
current temp= 38
current humid= 38
Alarm Off
current temp= 41
current humid= 25
Alarm Off
```

The status bar at the bottom indicates 'Local Python 3 • Thonny's Python' and the date '03-10-2022'.