

RMK COLLEGE OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

IBM NALAIYA THIRAN

ASSIGNMENT-2

TEAM LEADER: SWETHA R

TEAM MEMBER: ANUSHA R

DEEPTHI J

POOJA SHREE K

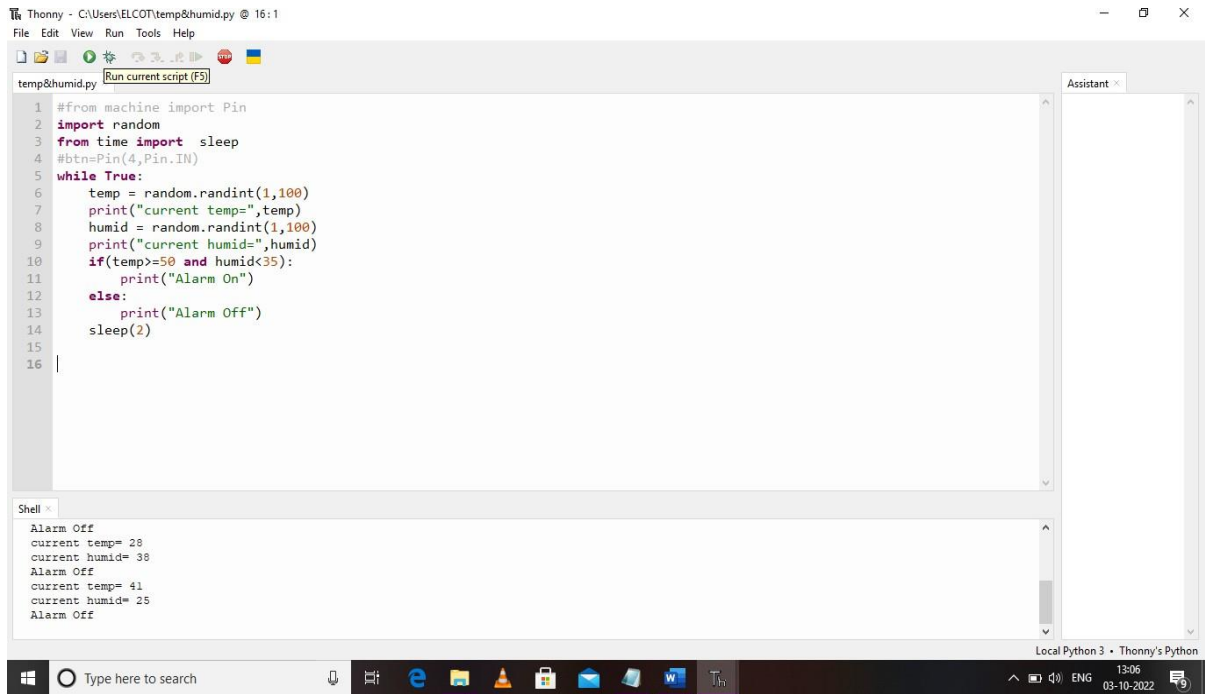
NANDHINI M

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
from 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 the 'machine' module, 'random' from the 'random' module, and 'sleep' from the 'time' module. It then initializes a pin 'btn' as 'Pin(4, Pin.IN)'. A 'while True' loop generates random temperature and humidity values (1-100), prints them, and checks if the temperature is greater than or equal to 50 and humidity is less than 35. If true, it prints 'Alarm On'; otherwise, it prints 'Alarm Off' and sleeps for 2 seconds. The 'Shell' window at the bottom shows the output of the script, displaying 'Alarm Off' and the current temperature and humidity values (28, 38; 41, 25) in a repeating pattern. The 'Assistant' window is also visible on the right side of the IDE.

```
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
```

Shell

```
Alarm Off
current temp= 28
current humid= 38
Alarm Off
current temp= 41
current humid= 25
Alarm Off
```

Local Python 3 • Thonny's Python