

VIVEKANANDHA COLLEGE OF ENGINEERING FOR WOMEN
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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
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ASSIGNMENT-2

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

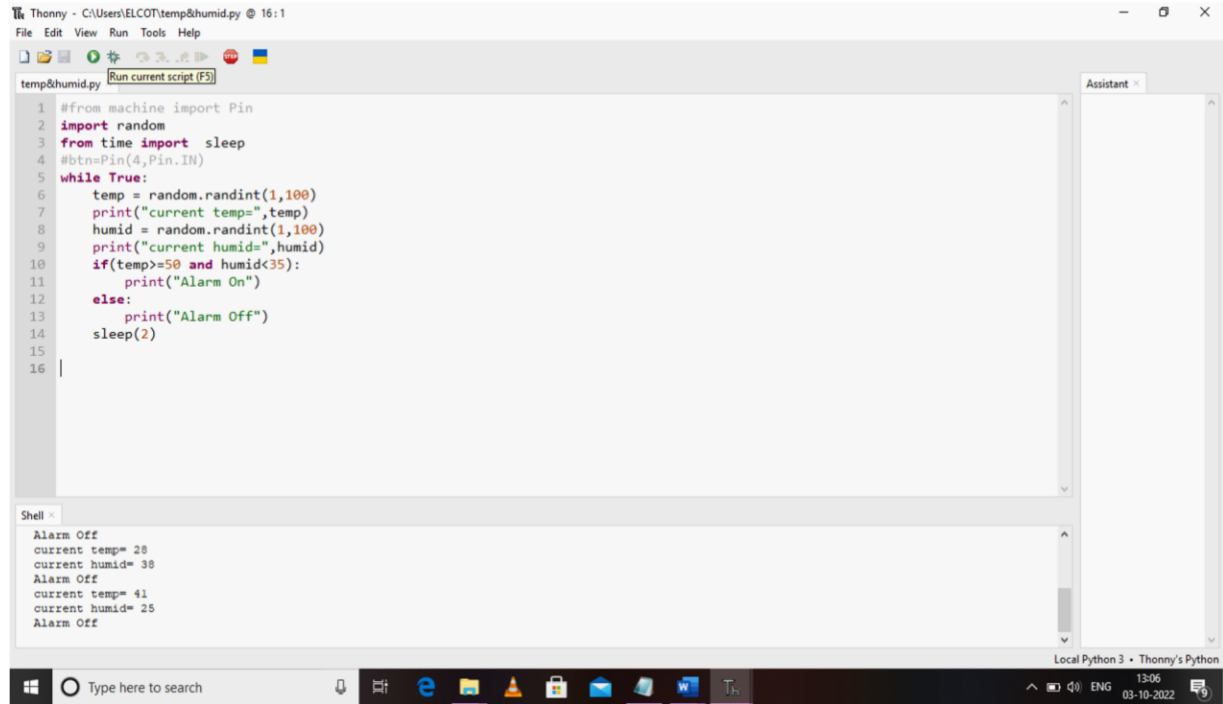
#btn=Pin(4,Pin.IN) while True:

    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 the 'Pin' module from 'machine', 'random' from 'random', and 'sleep' from 'time'. It initializes a pin (4) as an input. A 'while True' loop generates random temperature and humidity values (1-100) and prints them. An 'if' statement checks if 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.

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

The Windows taskbar at the bottom shows the system clock as 13:06 on 03-10-2022.