CODING AND TESTING

SPRINT-1

DATE	07-11-2022
TEAM ID	PNT2022TMID49260
PROJECT NAME	Hazardous area monitoring for industrial power plants powered by IoT

ALGORITHM:

1. Start
2. Import random and time modules
3. Loop infinitely
4. Print the random temperature and humidity values on python shell
5. Stop

PYTHON CODE:

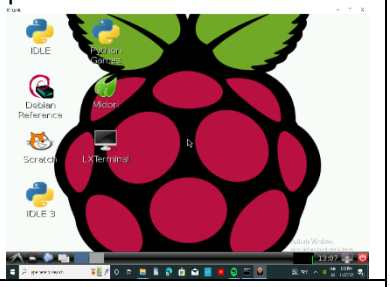
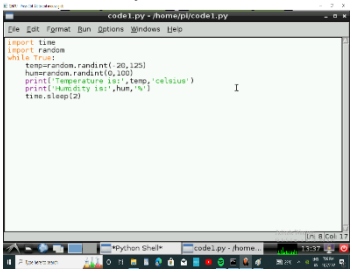
```
#GENERATING THE RANDOM TEMPERATURE AND HUMIDITY VALUES

import time
import random

while True:

    temp=random.randint(-20,100)

    hum=random.randint(0,100)

    print (“Temperature is:”, temp,”celsius”)

    print (“Humidity is:”, hum,” %”)

    time.sleep(2)
```

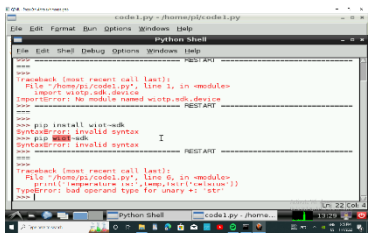
Test case template

Test Case ID:01	**Test designed by:** M.Raj vignesh
Test priority: medium	**Test Executed by**:M.Rubeena banu
Module name: Raspberry pi emulator installation	**Test execution date:**07-11-2022
Description: Test that raspberry pi emulator is running on windows 10	

Preconditions:

User has Windows 10 OS, login id and password for Quick emulator (qemu)

Test case name	**Test step**	Action	Test data	Expected result	Actual result
Install qemu and run	1	Go to https://www.bing.com/search?q=qemu+download&cvid=b1f47556805441179c05d4f0e49e3637&aqs=edge.2.69i57j0l8.5390j0j1&pglt=43&FORM=ANNTA1&PC=U531		Quick emulator Should be installed and run successfully	Quick emulator has installed and run successfully
Login into the virtualized raspberry pi platform	2	Enter the login id and password	Login id:pi Password: ****	User should be able to login	User has logged in to the virtualized raspberry pi platform 
Coding	3	Write the python code in IDLE3	Source code	User should be able to write the code in pre-installed IDLE3	User has written the code in pre-installed IDLE3 successfully 
Compile and run the module	4	Run the module		User should be able to run the module	The module has run successfully and results in

					error 
Debugging	5	Debug		Errors should be cleared	Errors are cleared
Compile and run	6	Compile and run the program again		Program should be run successfully	The program is run successfully without errors
Output	7	View the output		User should be able to generate the random temperature and humidity values	User has generated the random temperature and humidity value successfully