python™

Advance Training Exercise - 1

By Anup Chavda

Decorators, Mail Management, Profiling, Multi-Threading, Networking

1. Create a decorator that adds two random values between 1 to 10 to the functions where this decorator is used. Create 4 functions add, sub, mul, div which will have this decorator and call the 4 functions. When you're calling the function you should not pass any parameter however all the functions will be defined with parameters.

2. Create two different decorators. One will give the square of a number and the other one will increase the number by 10. Assign these two decorators to a function such that first the square of the no will be done and then 10 will be added and then the function operation will be done.

3. Create a decorator with 2 parameters. Assign these decorator to a function which also has 2 parameters. Multiply the parameters passed in the decorator and pass it to the function which is decorated by this decorator as an argument when calling the function from decorator.

4. Send an email using only plain text.

5. Send an email using HTML Text.

6. Send an email including HTML text and also 2 attachments one pdf file and one jpeg file.

7. Receive an email and print the detial of from, to, subject. Also parse the content of the attachment and if pdf or jpeg file

8. Create a module which has 4 methods. Create another python file where this module's methods will be used multiple times. Check the time utilized for these methods. Add different sleeping durations for all the methods. Display the profiling using the pstats library.

9. Read a python file and perform profiling on it.

10. Create a Thread that will print random numbers between the given number at the time of Thread Creation. Create 3 objects with different numbers. Thread 1 (1-10),

Thread 2(11-20, Thread 3(21-30). Add diffferent sleep time for each thread and print the random numbers between the given numbers by specific threads.

11. The same above example should first print 5 random numbers from first thread then 5 random numbers from second thread and then it should print 5 random numbers from 3rd thread using syncrhonization.

12. Make your main thread to wait until all the child threads have completed their execution.

13. Create 4 methods in the Server Socket file. Call these methods from child. Specify the method in the send() method from the child and interpret it in the server. Send minimum 2 parameters for each method. The result should be returned to the client socket and printed over there.

14. Call any URL and receive the response for it. Print the response text and url.

15. Call a URL which accepts input and pass it in json format and receive the response in json format.

SKYSCEND
BUSINESS SOLUTIONS

odoo
Ready Partner

Skyscend Business Solutions

www.skyscendbs.com
info@skyscendbs.com
+91-9909453634
+91-9725251544
+91-8320408557