DS Lab
Experiment 3

Implementation of RPC in Python

Implement a client-server system using **RPC** in python that do the following tasks:

Part 1

There is a single client and a single server in the system.

Server: On Server side, Server has an entry point procedure named ***fact_serv(num)*** which calculates the factorial of number ***num***.

Server processes the request of client by calculating the factorial of number ***num*** and sends back the results to clients for output.

Client1: Client has a list of numbers ***num_list*** = [15,33,23,12,9]. For each ***num*** in ***num_list***, it calls entry point procedure ***fact_serv(num)*** using **RPC mechanism.**

Part 2

Write a simple program and define a function similar to ***fact_serv(num)*** within the same program (**single protection domain**). Call this function from main function and calculates the factorial of each number in list ***num_list.***

Compare the above two program with respect to **total running time (calling + procedure execution + trap + switching time)** and give justification for the output.

Note:

1. Implement the programs on a single machine for better comparison.