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There are two python files in this project. One is for the "Registration Server" named *Registration\_Server.py* and the other one named *Peer.py* for the peers.

Registration server should ideally be executed on a separate machine which would act as the registration server.

### **Registration Server:**

The modules needed for *Registration\_Server.py* are time, datetime, socket, threading, os, platform, sys, random and pickle. To execute this script, just run the file from a command line once the module dependency is satisfied.

The user will be requested to provide the port number which will be used by the registration server. For the purpose, it has been requested to provide port numbers in the range of 65400 and 65500 because of VCL restrictions. But there is no limitation in the code and any free port can be provided to be used by the registration server. It would then run and wait for connections and accordingly provide the messages on the terminal where it is running, whenever a transaction happens.

### **Peers:**

The modules needed for *Peer.py* are socket, threading, os, platform, time, pickle and sys. To execute this script, it should be executed from a folder location such that the RFC files are copied in a folder name RFCs in the same location. RFC files are also attached with the script for ease of verification but it might be needed to remove some RFC files from the folder to actually demonstrate transfer of files between peers. The peer client and peer are instantiated in a sequence. This script would search for the existing RFC file in the local folder first and then only connect to the remote peer. It is needed that the port numbers used by each peer server are different.

User needs to provide the RFC number which s/he is looking for. After searching in the local folder, RFCQuery is sent to an active peer to check if the RFC file exists there. If the RFC file is found, it is downloaded to the requesting peer at the same time. It is important that even if there are no RFC files present in the Peer, there should be a folder named "RFCs" in the same path from where the script is to be executed.