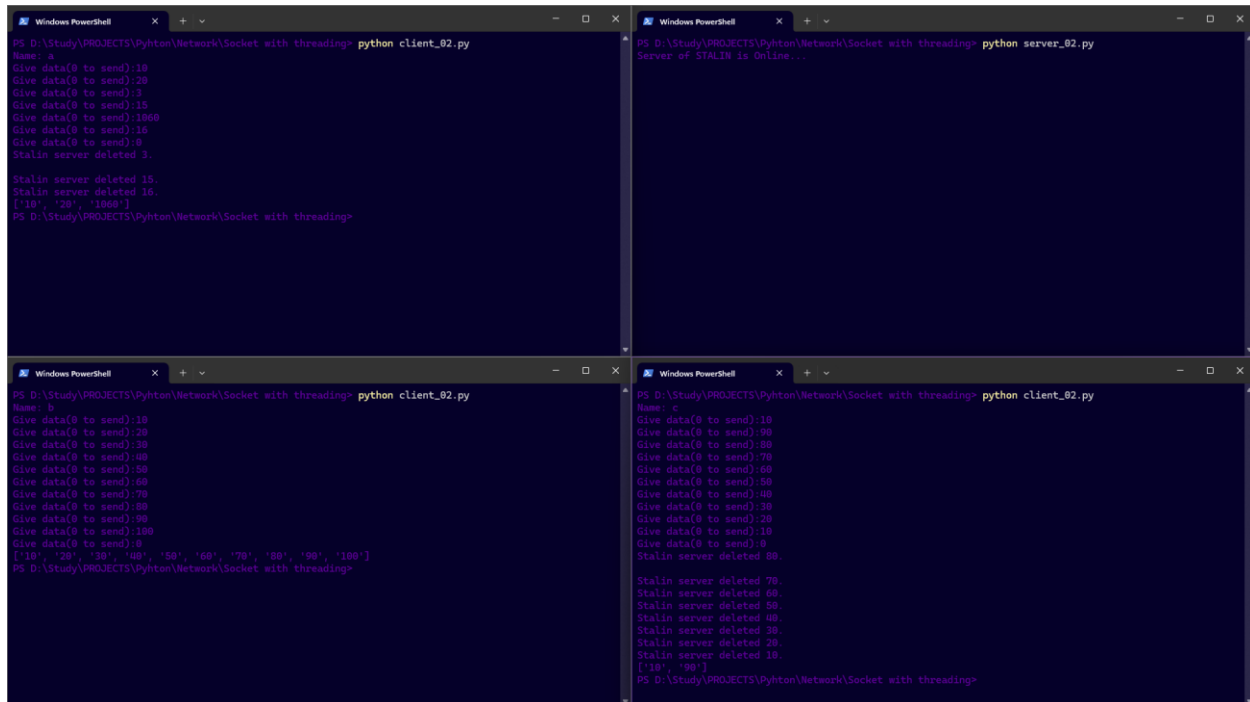


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The image displays four terminal windows arranged in a 2x2 grid, all running Windows PowerShell. The top-left window shows the execution of `python client_02.py` with Name: a, sending data to the server and receiving a sorted list. The top-right window shows the execution of `python server_02.py`, which outputs 'Server of STALIN is Online...'. The bottom-left window shows the execution of `python client_02.py` with Name: b, sending data and receiving a sorted list. The bottom-right window shows the execution of `python client_02.py` with Name: c, sending data and receiving a sorted list.

```
PS D:\Study\PROJECTS\Python\Network\Socket with threading> python client_02.py
Name: a
Give data(0 to send):10
Give data(0 to send):20
Give data(0 to send):15
Give data(0 to send):15
Give data(0 to send):1000
Give data(0 to send):10
Give data(0 to send):0
Stalin server deleted 3.

Stalin server deleted 15.
Stalin server deleted 10.
['10', '20', '1000']
PS D:\Study\PROJECTS\Python\Network\Socket with threading>
```

```
PS D:\Study\PROJECTS\Python\Network\Socket with threading> python server_02.py
Server of STALIN is Online...
```

```
PS D:\Study\PROJECTS\Python\Network\Socket with threading> python client_02.py
Name: b
Give data(0 to send):10
Give data(0 to send):20
Give data(0 to send):100
Give data(0 to send):50
Give data(0 to send):60
Give data(0 to send):70
Give data(0 to send):80
Give data(0 to send):90
Give data(0 to send):100
Give data(0 to send):0
Stalin server deleted 10.
['10', '20', '100', '50', '60', '70', '80', '90', '100']
PS D:\Study\PROJECTS\Python\Network\Socket with threading>
```

```
PS D:\Study\PROJECTS\Python\Network\Socket with threading> python client_02.py
Name: c
Give data(0 to send):10
Give data(0 to send):90
Give data(0 to send):80
Give data(0 to send):70
Give data(0 to send):60
Give data(0 to send):50
Give data(0 to send):40
Give data(0 to send):30
Give data(0 to send):20
Give data(0 to send):10
Give data(0 to send):0
Stalin server deleted 80.

Stalin server deleted 70.
Stalin server deleted 60.
Stalin server deleted 50.
Stalin server deleted 40.
Stalin server deleted 30.
Stalin server deleted 20.
Stalin server deleted 10.
Stalin server deleted 0.
['10', '90']
PS D:\Study\PROJECTS\Python\Network\Socket with threading>
```

Two test cases for the STALIN Server:

Test01) The server was not running before.

1. Starting the STALIN server.
2. Clients sending requests for connection to the STALIN server and receiving the acknowledgements.
3. After establishing the connections, the clients will prepare a list of data with their name as the first element of it. By giving "0", the whole list of data will be sent to the STALIN server.
4. In the STALIN server, the name of the client will be separated from the received list of data, and sends a new list of data, sorted using the STALIN sort, letting know the client in the same second when a data is deleted from the list.
5. After client receiving the new sorted data, the STALIN server will disconnect the client from the server.

Server: 127.40.63.1 Port: 4063 a: 127.40.63.1 Port: 54495 b: 127.40.63.1 Port: 54496
c: 127.40.63.1 Port: 54497

The image displays four terminal windows arranged in a 2x2 grid, all running the same Python script: `python client_02.py`. The top-left window shows a client named 'S1' sending data to 'server1' (127.40.63.1) on port 4063. The top-right window shows the server output, indicating 'Server of STALIN is Online...'. The bottom-left window shows a client named 'S2' sending data to 'server1' on port 4063. The bottom-right window shows a client named 'S3' sending data to 'server1' on port 4063. The output in the bottom-left window also shows 'Stalin server deleted 1' and 'Stalin server deleted 2', suggesting the server is being restarted or multiple instances are running.

```
PS D:\Study\PROJECTS\Python\Network\Socket with Threadings> python client_02.py
Name: S1
Give data to server1:1
Give data to server1:2
Give data to server1:3
Give data to server1:4
Give data to server1:5
Give data to server1:6
Give data to server1:7
Give data to server1:8
Give data to server1:9
Give data to server1:10
Stalin server deleted 0.
[11, 12, 13, 14, 15]
PS D:\Study\PROJECTS\Python\Network\Socket with Threadings>

PS D:\Study\PROJECTS\Python\Network\Socket with Threadings> python client_02.py
Name: S2
Give data to server1:1
Give data to server1:2
Give data to server1:3
Give data to server1:4
Give data to server1:5
Give data to server1:6
Give data to server1:7
Give data to server1:8
Give data to server1:9
Give data to server1:10
Stalin server deleted 1.
Stalin server deleted 2.
[13, 14]
PS D:\Study\PROJECTS\Python\Network\Socket with Threadings>

PS D:\Study\PROJECTS\Python\Network\Socket with Threadings> python client_02.py
Name: S3
Give data to server1:1
Give data to server1:2
Give data to server1:3
Give data to server1:4
Give data to server1:5
Give data to server1:6
Give data to server1:7
Give data to server1:8
Give data to server1:9
Give data to server1:10
[15, 16, 17, 18, 19]
PS D:\Study\PROJECTS\Python\Network\Socket with Threadings>
```

Test02) The server was running from the last test case. The same things that happened to the first test case, happens to the second test case.

Server: 127.40.63.1 Port: 4063 S1: 127.40.63.1 Port: 54508 S2: 127.40.63.1 Port: 54511
S3: 127.40.63.1 Port: 54512