

CSC4200/5200 – COMPUTER NETWORKING

RECITATION – SOCKET PROGRAMMING

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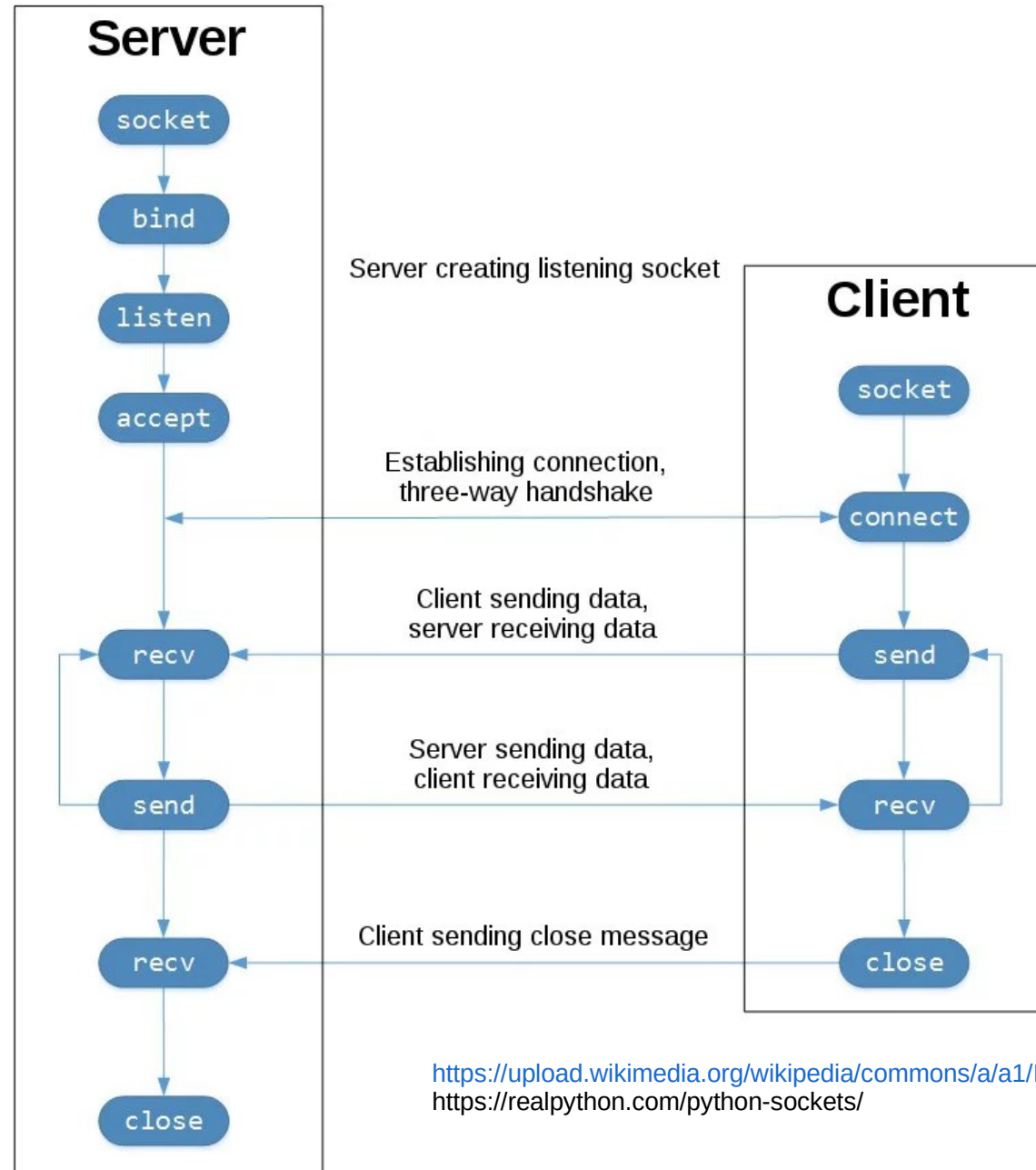
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Socket Overview

Server client communication

- Server listens on a port of your choice
 - Typically above 1023
- Client connects to server and starts sending data
 - Server receives data
 - Optional – server sends data and the exchange continues
- Client closes connection
- Client closes socket
- Server closes socket

Overview



https://upload.wikimedia.org/wikipedia/commons/a/a1/InternetSocketBasicDiagram_zhtw.png
<https://realpython.com/python-sockets/>

Steps

Server	Client
1. Create a TCP socket object	
2. BIND to localhost (127.0.0.1) and a PORT	
3. Print the port and host address	1. Create a socket object
4. LISTEN for connections	2. CONNECT to server at server IP and port
5. ACCEPT a connection	3. SEND data
6. RECEIVE data	
7. SEND data	4. RECEIVE data
8. Close	5. Close

Packing binary data (struct module in python, normal structures in C++)
