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Source URL:

youtube(sentdex) about socket programming

Initiating connection

https://www.youtube.com/watch?v=Lbfe3-v7yE0

Buffering and storing data

https://www.youtube.com/watch?v=8A4dqoGL62E

Sending and receiving python objects(dictionaries, lists)

https://www.youtube.com/watch?v=WM1z8soch0Q&t=5s

https://careerkarma.com/blog/python-list-files-in-directory/

https://stackoverflow.com/questions/24728933/sort-dictionary-alphabetically-when-the-key-is-a-string-name

https://stackoverflow.com/questions/67099229/list-all-files-available-in-server-directory-in-client-computer-using-python-soc

<https://stackoverflow.com/questions/237079/how-to-get-file-creation-modification-date-times-in-python>

TO INSTALL WATCHDOG for monitoring create, modify, delete events:

pip install watchdog

TO INSTALL DIRSYNC for synchronizing two directories

pip install dirsync

https://philipkiely.com/code/python\_watchdog.html

https://stackoverflow.com/questions/54688687/how-to-synchronize-two-folders-using-python-script

<https://thispointer.com/python-how-to-create-a-thread-to-run-a-functio>

to change file permission

<https://stackoverflow.com/questions/16249440/changing-file-permission-in-python>

Mention the path of your project folder under path in client.py

Compiling instructions:

* The code was tested using python version 3.8.5.
* To compile run serverb.py(SERVER B) using command python serverb.py in a command prompt
* Then run server.py(SERVER A) using command python server.py in another command prompt.
* Synchronization starts between server b and server a, if any changes to the files are made it is reflected on the server terminals.
* Then we can execute client code by running the command python client.py that sets up the connection with server a, makes a dictionary of the files in directory a and connects to server b that returns the dictionary of files in server b to server a.
* Server A sorts the file names by the first character and sends the sorted dictionary to the client.
* We then print out the file name, last modified, file size accordingly in the client terminal.