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Getting your homework *from* the Linux servers *onto* your desktop to submit to Canvas.

1) Open a terminal on your personal machine and change directories to your desktop (or anywhere you want to receive your homework).
   ○ This is where your homework will be copied to.

```
🔴🟡🟢                          📁 Desktop — -zsh — 100×30
(base) nathanmetens@Nathans-MacBook-Air ~ % cd Desktop
(base) nathanmetens@Nathans-MacBook-Air Desktop % █
```

2) Sign into the Linux server where your homework resides using **sftp,** not ssh:
   ○ **Secure File Transfer Protocol (SFTP)** is a network protocol that allows users to transfer files securely between a remote server and a client. -https://en.wikipedia.org/wiki/SSH_File_Transfer_Protocol

```
🔴🟡🟢                 📁 Desktop — ssh ‹ sftp metens@linux.cs.pdx.edu — 100×30
(base) nathanmetens@Nathans-MacBook-Air Desktop % sftp metens@linux.cs.pdx.edu
(metens@linux.cs.pdx.edu) Password:
Connected to linux.cs.pdx.edu.
sftp> █
```

3) Navigate to where your homework is located.

```
(base) nathanmetens@Nathans-MacBook-Air Desktop % sftp metens@linux.cs.pdx.edu
(metens@linux.cs.pdx.edu) Password:
Connected to linux.cs.pdx.edu.
sftp> ls
220hosts.txt                CS302                       CS430
Desktop                     Documents                   Downloads
JoyOfCodingWinter2025       Music                       Pictures
Practice                    Public                      Templates
Videos                      Week3_late.pdf              Week7.pdf
Week8.pdf                   X.sh                        cloud-metens-0ecfcdaf003d.json
cloud-metens.json           cs430-src                   main.py
mine.txt                    mpdemo                      public_html
rever-lookup.sh             tcss
sftp> cd CS302
sftp> ls
Prog1    Prog2    Prog3    Prog4_5
sftp> cd Prog1
sftp> ls
cs302-001-program1
sftp> cd cs302-001-program1
sftp> ls
a.out                   animal.cpp              animal.h                animalNames.txt
apples.cpp              apples.h                backup-prog1            cs302-001-prog1.tar
farm.cpp                farm.h                  main.cpp                node.cpp
node.h                  practice.cpp            trophy.txt
sftp> █
```

4) Type the right **get** command to get your homework (transferring a copy of your homework onto your local machine):

    i) To get only one file: <mark>get filename</mark>

```
sftp> get farm.cpp
Fetching /u/metens/CS302/Prog1/cs302-001-program1/farm.cpp to farm.cpp
farm.cpp                                        100%   26KB 383.2KB/s   00:00
sftp>
```
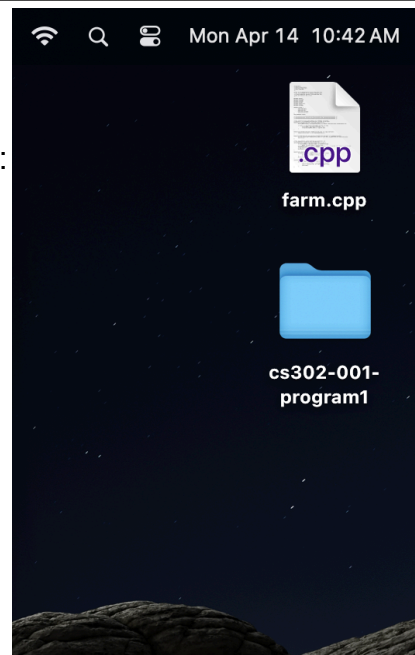
    ii) To get an entire directory: <mark>get -r directory</mark>

- The "-r" flag is for **recursive**. This means getting everything inside the directory, *including* the directory.

```
sftp> cd ..
sftp> ls
cs302-001-program1
sftp> get -r cs302-001-program1
Fetching /u/metens/CS302/Prog1/cs302-001-program1/ to cs302-001-program1
Retrieving /u/metens/CS302/Prog1/cs302-001-program1
a.out                                    100%   94KB 892.7KB/s   00:00
trophy.txt                               100%   178    4.6KB/s   00:00
farm.h                                   100% 6706   154.6KB/s   00:00
animal.cpp                               100% 7058   141.1KB/s   00:00
node.h                                   100%  709    14.9KB/s   00:00
animal.h                                 100% 1972    41.0KB/s   00:00
cs302-001-prog1.tar                      100%   70KB   1.6MB/s   00:00
apples.h                                 100% 1033    20.9KB/s   00:00
Retrieving /u/metens/CS302/Prog1/cs302-001-program1/backup-prog1
farm.h                                   100% 6706   152.4KB/s   00:00
node.cpp                                 100%  888    19.6KB/s   00:00
farm.cpp                                 100%   26KB 534.7KB/s   00:00
animalNames.txt                          100%  204     4.7KB/s   00:00
node.h                                   100%  709    12.8KB/s   00:00
apples.cpp                               100% 2593    57.3KB/s   00:00
apples.h                                 100% 1033    14.9KB/s   00:00
main.cpp                                 100% 5488   118.7KB/s   00:00
animal.cpp                               100% 7058   156.9KB/s   00:00
animal.h                                 100% 1972    44.0KB/s   00:00
trophy.txt                               100%  178     4.0KB/s   00:00
animalNames.txt                          100%  204     3.8KB/s   00:00
main.cpp                                 100% 5488   124.6KB/s   00:00
apples.cpp                               100% 2593    59.0KB/s   00:00
node.cpp                                 100%  888    19.3KB/s   00:00
farm.cpp                                 100%   26KB 478.4KB/s   00:00
sftp>
```

5) Exit sftp.

6) Look at your desktop to see the homework:

7) Drag and drop your homework file or folder into the Canvas DropBox, and you're done!