

General Instruction

- You may need to do some research to complete the assignment.
 - Submit your work in the Dropbox folder via BeachBoard (Not email or in class).
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1. (0 points) Install a **Java virtual machine** on your local machine.

- You shall run a java program on a **terminal environment** by typing like
`javac HelloWorld.java; java HelloWorld`

2. (40 points) Write a **FTP client** program using **Java** and **Apache Commons Net**.

- The file name should be **Assn3.java**. Otherwise, you will receive **zero** point.
- The program shall provide the functions of the following commands
 - `ls`: list contents of remote directory
 - `cd 'directory name'`: change to the remote directory
 - `cd ..`: change remote directory to its parent
 - `delete 'file name'`: delete the remote file
 - `get 'file name'`: receive the remote file
 - `get 'directory name'`: receive the remote directory recursively
 - `put 'file name'`: send the local file
 - `put 'directory name'`: send the local directory recursively
 - `mkdir 'directory name'`: make the directory on remote machine
 - `rmdir 'directory name'`: remove the remote directory recursively
 - * The 'file name' and 'directory name' can have spaces.
- The command line arguments will be passed to the program in the following formats.
 1. `args[0]`: IP of a FTP server
 2. `args[1]`: id:password
 3. The others are requested jobs. ex) `"ls" "mkdir test folder"...`
 4. The program shall execute the jobs in the given order.
- The program shall be executed in a terminal environment. Otherwise, you will receive **zero** point. (Locate `commons-net-3.6.jar` in the same folder of `Assn3.java`)
`javac -cp "commons-net-3.6.jar" Assn3.java`
`java -cp ".;commons-net-3.6.jar" Assn3 12.34.56.78 cecs327:cecs327 "ls"`
- Test your client program with the FTP server on your cloud machine.
- Submit your `Assn3.java` only.