

Worksheet 9: File Client/Server Applications

1. Write programs **FileClient.java** and **FileServer.java**, which will be a file data management system through a network. The operation details are as follows:
 - The Server program will operate in a multi-threaded manner using a **ThreadPool**, limiting simultaneous service to **10 clients at a time**, and providing services on **port number 6789**.
 - The Client will issue three commands to the Server:
 - **upload:** To send file data to the Server.
 - **Usage example:** java FileClient **upload** myfile.jpg
 - If the file **myfile.jpg** **does not exist** on the Client side, display an error: **"myfile.jpg not found."**
 - If the **server already has the file data to be uploaded**, **overwrite** the existing file data.
 - The upload command must be followed by the **file name**. **If arguments are incomplete**, display **"error"**.
 - **download:** To retrieve file data from the Server.
 - **Usage example:** java FileClient **download** myfile.jpg
 - If the file **myfile.jpg** **does not exist** on the server side, notify the user: **"myfile.jpg not found."**
 - The download command must be followed by the **file name**. **If arguments are incomplete**, display **"error"**.
 - **list:** To view the list of file data on the Server.
 - If there are commands other than **upload**, **download**, and **list**, the program should notify: **"command not found."**