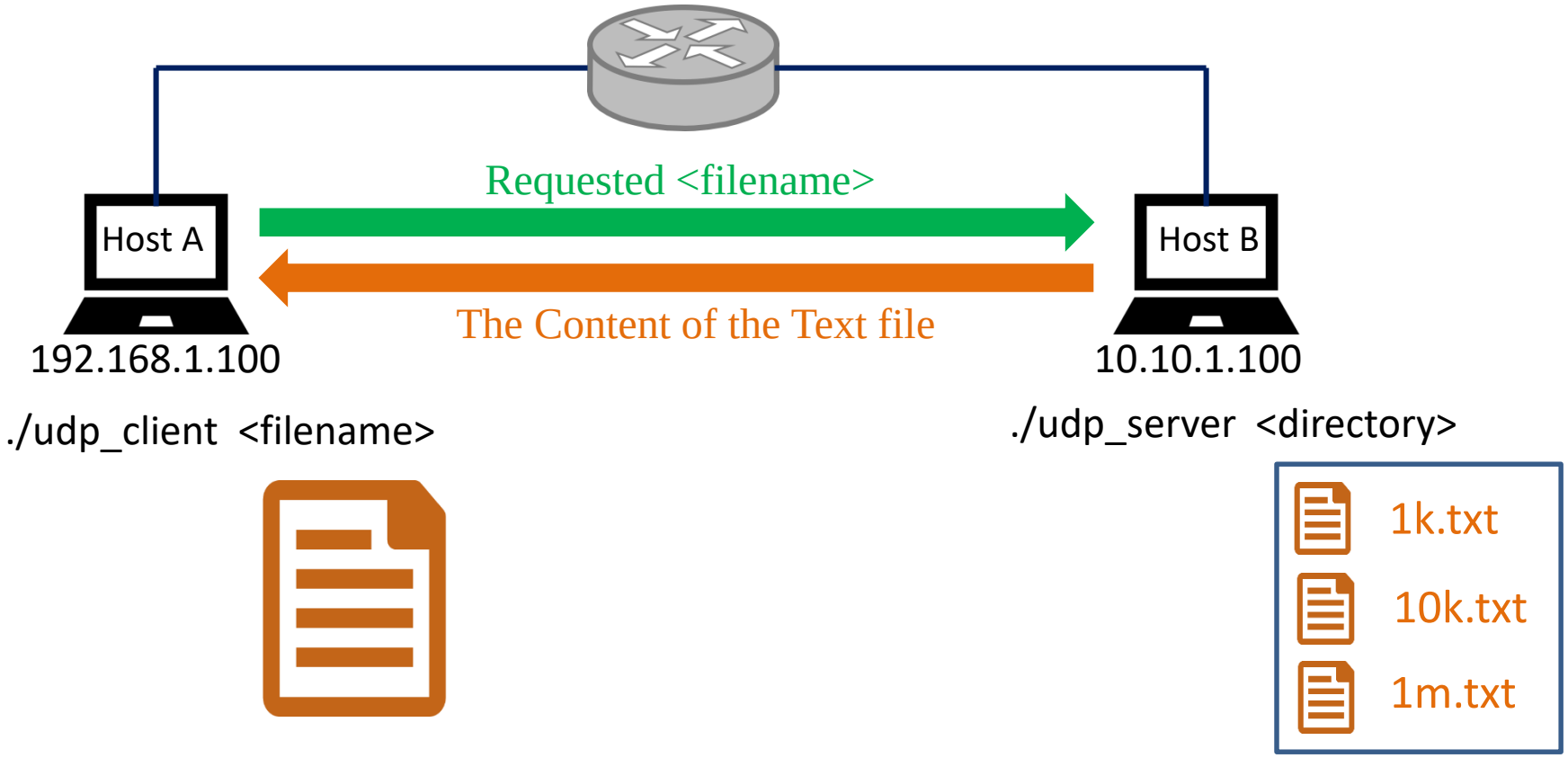
Project 1 (Simple File Transfer using UDP)



Project 1 (specifications)

In the first project, you have to develop two programs for simple file transfer from a UDP file server to a UDP client. The server program which is called **ufs.c** (UDP File Server) listens on **UDP port** number **8080** at **host-b**. The input argument of this program is a Directory that contains a group of text files.

On the other side, the client program is called **ufc.c** (UDP File Client) and has an input argument which is a filename. The given filename will be sent to the UDP file server and the server program checks the existence of the file within the given Directory. If it finds the requested file, the file content will be returned back to the client program and will be stored as a file (with the same name). Otherwise, the server returns a "**Not Found**" message to the client program that will be displayed on the screen.

For the sake of simplicity, you can assume that there are only 3 files with different sizes (1k.txt, 10k.txt, 1m.txt) in the given Directory at the server side. So, the client program has only 3 choices to receive a file from the server. If the given filename at the client program is something else, then the server returns "**Not Found**" message to the client.

The buffer size at the client and server programs must set to 1024 Bytes. Thus for the files that are larger than 1 KB, you need to run **sendto/recvfrom** functions more than once. Note that you need to use C functions for doing the basic file operations (read/write).

Further details/examples will be provided during the next lab sessions.