

# Laboratory Assignment #9

## Super Store and Per Product Sales Statistics: The Networked Version with TCP

Consider the Super Store and Per Product Sales applications. This time, the processing will be coordinated by a server and a single, multi-threaded client.

First, the server will send a list of URLs to the client upon connection. The client, after receiving the list of URLs, will create a thread for each URL in the list. The threads will download the corresponding files, process them (depending on the task, i.e. Super Store or Per Product Sales) and start sending the results to the server. Once all of the calculations are complete for their assigned file, the clients will quit.

Please note that all traffic must be handled using the TCP protocol. You should use the same URLs as in the previous week for your server to get the files.

- <http://homes.ieu.edu.tr/culudagli/files/SE375/datasets/01-January.txt>
- <http://homes.ieu.edu.tr/culudagli/files/SE375/datasets/02-February.txt>
- <http://homes.ieu.edu.tr/culudagli/files/SE375/datasets/03-March.txt>
- <http://homes.ieu.edu.tr/culudagli/files/SE375/datasets/04-April.txt>
- ...
- <http://homes.ieu.edu.tr/culudagli/files/SE375/datasets/12-December.txt>

When the processing of every file is completed, the connection should close, the client should quit and the server should display the results.

The results will be different depending on the task (i.e. Super Store or Per Product Sales). If the task is Per Product Sales, the server should be queried by the user after all the results have been collected. For Super Store, simply displaying the total sales numbers on the console should be enough.