Purpose

Purpose of this assignment is to get deeper exploration and to gain extensive familiarity with various STL containers. We will be enhancing our learning by implementing a solution to a practical problem from real world.

Task

We are given an unknown number of data-files. These files are located in **…/Projects/final\_project/data\_files**. The indexes of these files are located in **names.csv**. Each line of **names.csv** file is part of filename – we are required to read each index (each line) from names.csv file, make it a filename, open that file, read the data from that file, perform some mathematical calculations, and write results into another file.

We are required to write two containers. One is to keep daily data and other one is to keep the first container type -- index (tickers) data.

1. This means that entire file will be saved line by line in first container -- each line representing an element in first container. For example, if a file has 10 lines, first container will have 10 elements.
2. Second container will be used to keep containers of first container type. For example, if I have 4 index lines, my second container will contain 4 elements.

This means that second container is a container of containers.

Double Top is a price formation pattern. It appears as two consecutive peaks of approximately the same price on a price-versus-time chart of a market. The two peaks are separated by a minimum in price, a *valley*. The price level of this minimum is called the neck line of the formation. The formation is completed and confirmed when the price falls below the neck line.