

# CS112 - Programming and Problem Solving

## Lab Assignment #6

### Summer 2004

The purpose of this exercise is to reinforce what you know about the use of files, structs and arrays in C++.

Your (wealthy) neighbor has asked you to help him keep track of his stock portfolio. He has created a file named `stocks` containing the following information on the stocks that he owns:

Stock Name	Sector	Current Share Price	No. of Shares Owned
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The sector is a single character which specifies the type of company, according to the following code:

- A - Auto Companies
- C - Consumer Products
- F - Financial/Insurance
- I - Industrial
- T - Technology

You are to write a C++ program which inputs this stock information from the file, computes the value of each sector of his stock portfolio, and prints the total value of his portfolio, similar to the sample below:

**Sample output:**

```

Jim's Stock Portfolio

Auto Sector
-----
Stock Name      Number of      Current Share   Total Stock
                Shares Owned   Value           Value
-----
FordM           87             18.76           1632.12
GnMtr           90             51.40           4626.00
                -----
                Total for auto sector:    $ 6258.12

Consumer Products Sector
-----
Stock Name      Number of      Current Share   Total Stock
                Shares Owned   Value           Value
-----
Albertsn        542            34.39           18639.38
.               .               .               .
.               .               .               .
                -----
                Total for consumer products sector:    $ 6258.12
.               .               .               .
.               .               .               .
                -----
                Total Portfolio Value    $ xxxxxx.xx
    
```