

## CS127-5L: Computer Programming 2 Laboratory

### Machine Problem #3: Struct (Records)

Name:	Carreon, Ma. Addine Anne T.	Score:
Section:	A35	Date: 03/16/2023

#### Instructions:

1. Save your file as Surname\_Firstname\_MP3. Ex. Isip\_MP3.cpp
2. You will submit the following and send it to BB .
  - a. PDF file of Machine Problem 1 provided with the screenshot of your answers (Sample Run)
  - b. C++ script with .cpp extension.
3. Your program must have comments for each section.  
Header Comments:

Write a description of the program.  
Written by: Cheryl Mari M. Isip  
Date: March 17,2023  
Time: 7:30am  
Program: BSCPE  
Course: CS127-5L  
Section: B20  
School: Mapua University

#### EXERCISE

Write a C++ program that uses a structure for storing a stock name, its estimated earnings per share, and its estimated price-to-earnings ratio. Have the program prompt the user to enter these items for five different stocks, each time using the same structure to store the entered data. When the data has been entered for a particular stock, have the program compute and display the anticipated stock price based on the entered earnings and the price-per-earnings values. For example, if a user enters the data XYZ 1.56, 12, the anticipated price for a share of XYZ stock is  $(1.56) \times (12) = \$18.72$ .

## CS127-5L: Computer Programming 2 Laboratory Machine Problem #3: Struct (Records)

Take a screenshot and paste your output:

The image displays two screenshots of a Visual Studio IDE, showing the development and execution of a C++ program for calculating stock prices based on user input.

**Top Screenshot:** The code editor shows the source file `Carreon_MP3.cpp`. The program uses a `struct Stock` to store stock information and calculates the anticipated stock price based on the estimated earnings per share and the price-to-earnings ratio. The code includes comments, headers, and a `main` function that prompts the user for stock details and calculates the price for five different stocks: Ma, Addine, Anne, Tubice, and Carreon.

**Bottom Screenshot:** The same code is shown, but the `main` function is now empty, indicating that the program has been executed and the output is displayed in the `Microsoft Visual Studio Debug Console`. The output shows the results of the calculations for each stock, including the name, estimated earnings per share, price-to-earnings ratio, and the anticipated stock price.

```
1 //The code is to use structure for storing stock name, estimated earnings per share, and its estimated price-to-earning ratio
2 //Written by: Ma. Addine Anne T. Carreon
3 //Date: March 16, 2023
4 //Time: 2:20 PM
5 //Program: BSOS
6 //Course: CS127-5L
7 //Section: A35
8 //School: MAPUA University
9
10 #include <iostream>
11 #include <iomanip>
12 using namespace std;
13
14 struct Stock
15 {
16     string StockName;
17     double EstimatedEarningPShare;
18     double EstimatedPriceTEarning;
19 };
20
21 int main()
22 {
23     struct Stock TheStocks;
24     for (int x = 0; x < 5; x++)
25     {
26         cout << "Enter the name of the stock: ";
27         cin >> TheStocks.StockName;
28         cout << "Enter the estimated earning per share: ";
29         cin >> TheStocks.EstimatedEarningPShare;
30         cout << "Enter the estimated price-to-earnings: ";
31         cin >> TheStocks.EstimatedPriceTEarning;
32         cout << "The anticipated stock price for the share of " << TheStocks.StockName << "'s Stock" << " is $" << fixed << setprecision(2) << TheStocks.EstimatedEarningPShare * TheStocks.EstimatedPriceTEarning << endl;
33     }
34     return 0;
35 }
```

Microsoft Visual Studio Debug Console

```
Enter the name of the stock: Ma
Enter the estimated earning per share: 10.1
Enter the estimated price-to-earnings: 20.3
The anticipated stock price for the share of Ma's Stock is $205.03

Enter the name of the stock: Addine
Enter the estimated earning per share: 15.3
Enter the estimated price-to-earnings: 33.4
The anticipated stock price for the share of Addine's Stock is $511.02

Enter the name of the stock: Anne
Enter the estimated earning per share: 20
Enter the estimated price-to-earnings: 35.2
The anticipated stock price for the share of Anne's Stock is $704.00

Enter the name of the stock: Tubice
Enter the estimated earning per share: 14.8
Enter the estimated price-to-earnings: 28
The anticipated stock price for the share of Tubice's Stock is $414.40

Enter the name of the stock: Carreon
Enter the estimated earning per share: 55
Enter the estimated price-to-earnings: 84.3
The anticipated stock price for the share of Carreon's Stock is $4636.50

C:\Users\Addine Carreon\Desktop\COMPUTER\LECTURE\Carreon_MP3\Debug\Carreon_MP3.exe (process 4560) exited with code 0
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
```

Output

```
33°C Mostly sunny
Add to Source Control Select Repository
File Edit View Git Project Build Debug Test Analyze Tools Extensions Window Help Search (Ctrl+Q) Carreon_MP3
Debug x64 Local Windows Debugger Auto
Solution Explorer Property Manager Git Changes
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