

Week 2 Assignment: Reading and Writing Files

Directions: You are to write a C++ program that meets the instruction requirements below.

Deliverables:

Your C++ source code file. (The file with the .CPP extension). No other files will be accepted.

- A screenshot of your program running.

Program Instructions:

Consider the following incomplete C++ program:

```
#include <iostream>
```

```
int main()
```

```
{
```

```
...
```

```
}
```

Write a statement that includes the header files fstream, string, and iomanip in this program.

Write statements that declare inFile to be an ifstream variable and outFile to be an ofstream variable.

The program will read data from the file inData.txt and write output to the file outData.txt. Write statements to open both of these files, associate inFile with inData.txt, and associate outFile with outData.txt.

Suppose that the file inData.txt contains the following data:

```
Giselle Robinson Accounting
```

```
5600 5 30
```

```
450 9
```

```
75 1.5
```

The first line contains a person's first name, last name, and the department the person works in. In the second line, the first number represents the monthly gross salary, the bonus (as a percent), and the taxes (as a percent). The third line contains the distance traveled and the traveling time. The fourth line contains the number of coffee cups sold and the cost of each coffee cup. Write statements so that after the program executes, the contents of the file outData.txt are as shown below. If necessary, declare additional variables. Your statements should be general enough so that if the content of the input file changes and the program is run again (without editing and recompiling), it outputs the appropriate results.

Name: Giselle Robinson, Department: Accounting

Monthly Gross Salary: \$5600.00, Monthly Bonus: 5.00%, Taxes: 30.00%

Paycheck: \$4116.00

Distance Traveled: 450.00 miles, Traveling Time: 9.00 hours

Average Speed: 50.00 miles per hour

Number of Coffee Cups Sold: 75, Cost: \$1.50 per cup

Sales Amount = \$112.50

Write statements that close the input and output files.

Write a C++ program that tests the statements in parts a through e.

Grading Criteria Assignments	Maximum Points
Program accomplishes requested operations per instructions	40
The code works and meets all assignment specifications	30
The code is organized and easy to follow and output is clear and clean	20
Uses software tools correctly and efficiently	10
Total	100