Mark as True or False:

1. An input stream is a sequence of characters from a computer to an input device:

False (p124)

1. To use cin and cout in a program, the program must include the header file iostream:

True (124)

1. Suppose **pay** is a variable of type **double**. The statement cin >> pay; requires the input of a decimal number:

False (p126)

1. The statement cin >> length; and length >> cin; are equivalent:

False (p125)

1. When the statement cin >> num1 >> num2; executes, then after inputting a number into the variable num1 the program skips all trailing whitespace characters:

True (p126)

1. To use the predefined function pow in a program, the program must include the header file **cppmath:**

False (P131)

1. The statement cin.get(ch); inputs the next character into the variable ch:

True ( p134)

1. When the input stream enters the fail state, the program terminates with an error message:

False (p140)

1. To use the manipulators **fixed** and **showpoint**, the program does not require the inclusion of the header file **iomanip**:

True (P 145-147)

1. The statement **cin >> right;** sets the input of only the next variable right justified:

False (P154)

1. To input data from a file, the program must include the header file **fstream**:

True (p160)

Part 2)

|  |  |  |
| --- | --- | --- |
| I | P | O |
| firstName | Read in | Format and output all variables |
| lastName | Read in |  |
| department | Read in |  |
| Salary | Read in |  |
| bonus | Read in |  |
| Taxes | Read in |  |
| Distance | Read in |  |
| travelTime | Read in |  |
| coffeePrice | Read in |  |
| coffeeSold | Read in |  |
|  | Calculate paycheck |  |
|  | Calculate avgSpd |  |
|  | Calculate coffeeTotal |  |

Algorithm:

Establish read in file and output file

Establish proper float formatting for the output file

Store from file into the strings: firstName, lastName, dept

Store from file into the doubles: salary, bonus, taxes

Calculate double paycheck

Paycheck = salary + (salary \* (bonus / 100) ) + (salary \* (taxes / 100) )

Correctly format and write the above variables into the outfile, followed by an extra line

Store from file in to the doubles: distance, travelTime

Calculate avgSpd

avgSpd = distance / travelTime

Correctly format and write the above 3 variables into the outfile, followed by an extra line

Store from file into the int: coffeeSold

Store from file into the double: coffeePrice

Calculate coffeeTotal

coffeeTotal = coffeeSold \* coffeePrice

Close the infile and outfile