CSC 102 Chapter 2 Program Assignment

Things to remember:

* 1. Think about the data types, don’t forget about constants.
  2. Make sure to make it user friendly – the user has to know what is going on.

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Problem: You have just been hired as a fabric merchandiser. Your job is to purchase the fabric from the textile factories in Europe. To do so, you will need to create a program that converts the desired yards needed to fill the order to meters. (5 pts)

Procedure: The formula is: meters = yards \* 0.9144

Ask the user for how many yards, convert, and then display the result. Note that the conversion rate never changes (it is constant).

Example: for a 100 yards to be converted into meters - 91.44 meters = 100 yards \* 0.9144

Problem: You have just started working. You want to be able to calculate your paychecks. (For the purpose of this, we are using the lowest tax bracket of 10%.) (5 pts)

Procedure: The formulas are: gross pay = pay rate \* how many hours worked

net pay = gross pay - gross pay \* 10%

Ask the user for pay rate and how many hours worked, calculate, and display the result.

Example: for 20 hours at $7.25 an hour the net pay is $130.5

Problem: You want to be able to plan for vacation time! You want to create an app that will let you know how much the gasoline part will cost. (5 pts)

Procedure: The formulas are:

how many gallons = road trip distance / how many miles to the gallon

gas cost = how many gallons \* current gas price

Ask the user for the required information and display the information.

Example: Gas price: $2.35

How many miles to the gallon: 28.6

Round Trip distance: 150 miles

Gasoline Cost = $12.33