

## CS 128 – Introduction to C++, Assignment 1

The purpose of this homework is to gain experience using data types, variables, operators and expressions.

1. A car holds 15 gallons of gasoline and can travel 375 miles before refueling. Write a program that calculates the number of miles per gallon the car gets. Display the results on the screen.

Hint: Use the following formula to calculate miles per gallon (MPG)  
$$\text{mpg} = \text{miles driven} / \text{gallons of gas used}$$

2. Suppose an employee gets paid every two weeks and earns \$2,200 each pay period. In a year the employee gets paid 26 times. Write a program that defines the following variable.

**payAmount:** This variable will hold the amount of pay the employee earns each pay period. Initialize the variable with 2200.0

**payPeriod:** This variable will hold the number of pay periods in a year. Initialize the variable with 26

**annualPay:** This variable will hold the employee's total annual pay which will be calculated

The program should calculate the employee's total annual pay by multiplying the employee's pay amount by the number of pay periods in a year and store the result in the annualPay variable. Display the total annual pay on the screen.

### Requirements

- Use the file name source.cpp and write both programs inside your main() method. Separate them using a multiple line comment.

```
/*  
    Question 1. MPG Program  
*/  
  
/*  
    Question 2. Employee Salary Program  
*/
```

- Use comments to explain your code. Use correct styles and code conventions.
- Use appropriate variable types
- Make sure you have your name and Bronco ID in the header comment  
/\* Name: Jane-Joe  
\* Bronco ID: 12345678  
\* Sources of Help: Jon Doe helped me with.....  
\*/

**Due:** June 21, 2018 by 11.59 PM. submit your source.cpp file to Blackboard.

**Total Points = 10 pts**