

## CSC 115

Assignment #2; due on Wednesday, October 2 before start of class via email.

1. Create a simple flowchart to calculate the sum of three numbers and display the result.
2. Create a pseudo-code program to perform the same task, i.e. as stated in question one, above.
3. Create a simple flowchart to input two numeric values, specifically a numerator and denominator. Next determine the quotient and print out the result, provided that the denominator is not zero. When the user does enter a zero for the denominator do not attempt to determine the quotient; rather print out an error message stating that division by zero is not possible.
4. Create pseudo-code for the problem specified in question #3.
5. Write a program in Scratch to perform the method enumerated in question #3. Be sure to test for values that include valid numbers that produce whole numbers as the result (e.g.  $4/2 = 2$ ), inputs that generate whole numbers with fractional parts (e.g.  $3/2 = 1.5$ ), and enter zero for the denominator. Also be sure to provide a snapshot of your Scratch program.
6. Write a program in Scratch that performs the task specified in question #1; be sure to provide a snapshot of your Scratch program.
7. Write a "tip calculator" in Scratch; your program must accept two items:
  - a. Cost of bill without tax (e.g. \$20.00 entered as 20.00)
  - b. Percentage of tip, e.g. 15% (would be entered as 0.15)

The output shall be in dollars and sense, e.g. a 20.00 bill (without tax) with a 15% tip would generate a tip of \$3.00.