## Assignment #3

(1) A) Use a loop to find the sum of the first 100 integers i.e. 1 + 2 + 3 + … + 100

 Test your program the answer should be 5050

 (1) B) Modify the previous program to allow the user to type in a starting number and

 an ending number and find the sum of all the numbers between them.

 ie 17 + 18 + 19 + … + 301

 Test your program using 1 to 100, the answer should be 5050

 Then test your program with 2 to 20, the answer should be 209

(1) C) Input a starting number, a difference number and the total number of numbers

 you want to add. Use a loop to determine the sum of the numbers.

Ex. Start = 10 difference = 3 total = 5

 Sum = 10 + 13 + 16 + 19 + 22

 Difference of 3

(1) D) Use a loop to calculate n!. Allow the user to input the number n.

 Ex. 8! = 1x2x3x4x5x6x7x8

 11! = 1x2x3x4x5x6x7x8x9x10x11

Test your program with the following numbers :a) n = 5 , n! = 120 b) n = 8, n! = 40320