

Loops Continued

Part 1 - Calculating Factorials

Write a program to calculate the factorial value of a number. The factorial value of a number n is calculated by multiplying all the integers from n to 1 (or you go from 1 to n since multiplication is commutative). $5! = 5 \times 4 \times 3 \times 2 \times 1$

Your program should allow the user to input an integer value into an **input box**. The program will then calculate and display the factorial value for the integer.

Your output should be displayed in a listbox in the following format (if the user entered a 5 the output would be: **5! = 120**)

Part 2 - Fibonacci Sequence

Each number of the Fibonacci sequence is the sum of the two preceding numbers.

1,1,2,3,5,8,13,....

Design and develop a program that will compute the first n integers of the Fibonacci sequence. Only accept values of n greater than 3 and less than or equal to 50. Display the results in a single column in a listbox.

Each part of this assignment should be a separate button on the same form. Use group boxes to add order to your form.

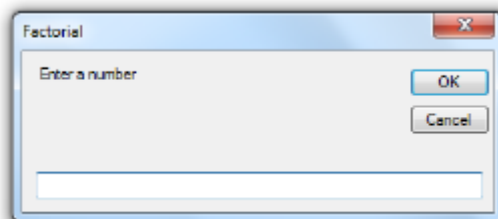
Notes on InputBox

Read Page 6-4 in the textbook.

InputBox() function can be used as a way to get information from the user similar to a textbox.

The information will be stored as a string.

StringVariable = **InputBox** (prompt, title)



```
Dim enteredText as String
```

```
enteredText = InputBox("Enter a number", "Factorial")
```

when the user clicks the OK button, control is returned to the form and the value input by the user is now stored in the variable *enteredText*.