## Lesson 7 Assignment

For the assignment, try using loops for a few simple but repetitive tasks. You can or try one or more of my suggestions, or you can choose your own tasks.

For a simple loop, ask for a starting and ending number, and display the numbers in between. For a slightly more complex loop, handle the case where the ending number is less than the starting number by counting backward.

See my version of this loop

Another possibility is to ask for a positive integer and calculate its factorial value. The factorial value of a number n is  $1 \times 2 \times 3 \times ... \times n$ . So the factorial value of 4 is  $1 \times 2 \times 3 \times 4$ , or 24.

See my version of this loop

Here's another suggestion: Ask for a number, and calculate that many terms in the Fibonacci sequence. Fibonacci numbers start with 0 and 1, and then each one is the sum of the two before it. The first few terms in the sequence are 0, 1, 1, 2, 3, 5, 8, 13, 21, and 34. So the next Fibonacci number (the 11th one) would be 21 + 34, or 55.

See my version of this loop

After you're done, drop by the Discussion Area and share about how it went.

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