// Example 2.1 While1Demo.java

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// A class for illustrating the while-statement. A typical run:
// %> java While1Demo
// Enter integer (a negative to stop): 4
// 4 is non-negative.
// Enter integer (a negative to stop): -3
// Enter integer (a negative to stop): 5
// 5 is non-negative.
// Enter integer (a negative to stop): -2
// Finally, enter integer you want to count to: 12
// Count 1 to 12: 1 2 3 4 5 6 7 8 9 10 11 12

public class While1Demo
{
    public static void main( String[] args )
    {
        Terminal terminal = new Terminal();  // for input and output

        // while tests a condition
        int n = terminal.readInt("Enter integer (a negative to stop): ");
        while ( n >= 0 ) {
            terminal.println( n + " is non-negative." );
            n = terminal.readInt("Enter integer (a negative to stop): ");
        }
        terminal.println();

        // while tests a boolean variable
        boolean more = true;
        while ( more ) {
            n = terminal.readInt("Enter integer (a negative to stop): ");
            if ( n >= 0 ) {
                terminal.println( n + " is non-negative." );
            } else {
                more = false;
            }
        }

        // while used for counting
        n = terminal.readInt("Finally, enter integer you want to count to: ");
        int i = 1;
        terminal.print( "Count 1 to " + n + ":");
        while ( i <= n ) {
            terminal.print( " " + i );
            i++;  // same as i = i + 1
        }
        terminal.println();
    }
}