CS1400 Lab 23: Using the Split Method

Oftentimes you will read a line of text from the console that contains multiple pieces of data. For example, you might have an application that asks for a first name and a bowling score to be entered on the same line, like this:

```
Sam 230
```

We have been using the ReadLine( ) method to read in one line of data. This works fine when there is just one piece of data on the line. But what do you do in this case, when a line contains two pieces of data?

The Split Method

It turns out that the String class has a method named *Split* that will parse a string into individual pieces. These pieces are stored in an array of strings. The code to do this looks like the following. This example reads one line of data from the console and parses it into a string (the first name) and an integer (the bowling score).

```
     // Prompt the user
     Console.WriteLine("Enter your first name and score
on one line");
     Console.WriteLine(" separated by a space.");
     // Read one line of data from the file and save it
in inputStr
     string inputStr = Console.ReadLine( );
     // The Split method creates an array of two strings
     string[ ] scoreInfo = inputStr.Split( );
     // Parse each element of the array into the correct
data type
     string name = scoreInfo[ 0 ] );
     int score = int.Parse(scoreInfo[ 1 ] );
     . . .
```

The general algorithm for reading and splitting a string containing multiple pieces of data separated by a space then looks like this:

1. Read a line of data from the file and store it in a string
2. Call the string's Split method to break the string into an array of strings - each element of the array will contain one piece of data from the original string.
3. Parse each element of the array into its correct data type and save it.