File Paths

The Default File Path

When creating a StreamReader or StreamWriter object, if you pass a simple file name as the parameter, then your program will look in the current directory to find the file. This is the directory where your executable is being executed from.

Specifying a Full Path

If you want your program to read or write a file that is someplace other than in the current directory, then you have to specify the full path to the file. C# provides several ways of writing a path. Suppose that you want to read from the the file *scores.txt* located in *c:\TestData*. You could write the code to create the StreamReader object and specify the path in any of the following formats:

```
StreamReader dataFile = new
StreamReader("c:\\TestData\\scores.txt");
StreamReader dataFile = new
StreamReader("c:/TestData/scores.txt");
StreamReader dataFile = new
StreamReader(@"c:\TestData\scores.txt");
```

Reading From the My Documents folder

If you are using Windows Vista or Windows 7, Microsoft has made it impossible to store a file or create a file that is in the root C:\ drive. For security reasons, they want you to store all of your data in your My Documents folder. This creates special problems when reading and writing files, because the path to your file can be quite lengthy. Fortunately the .Net library gives us a way to get this path from the computer. The following program shows you how to let the user just enter in the name of a file in his or her My Documents folder, and get the path from the computer.

```
using System;
using System.IO;

class Program
{
   static void Main()
   {

   // This line of code gets the path to the My
```

```
Documents Folder
   string environment = System.Environment.GetFolderPath
   (System.Environment.SpecialFolder.Personal) + "\\";

   Console.WriteLine("Enter a file name in My Documents:
");
   string input = Console.ReadLine();

   // concatenate the path to the file name
   string path = environment + input;

   // now we can use the full path to get the document
   StreamReader myFile = new StreamReader(path);
   int n = int.Parse(myFile.ReadLine());
   Console.WriteLine("read {0}", n);

   Console.ReadLine();
   }//End Main()
}//End class Program
```