

COMPUTATIONAL METHODS

Visual Basic Programming – Demonstration Program 11

```
' ConsoleCopy - demonstrate safe handling of files and error reporting
'
Imports System.IO
'
Module ConsoleCopy
    '
    Sub Main(ByVal Args() As String)
        '
        If (Args.Length <> 2) Then
            Console.Error.WriteLine("usage: ConsoleCopy input.txt
output.txt")
            Environment.Exit(1)
        Else
            ' get file names
            Dim ipfile As String = Args(0)
            Dim opfile As String = Args(1)
            ' protect file operations in try .. catch
            Try
                ' open the files
                Dim sr = New StreamReader(ipfile)
                Dim sw = New StreamWriter(opfile)
                ' copy the contents line by line
                Dim line As String
                Dim count As Integer = 0
                While Not sr.EndOfStream
                    line = sr.ReadLine
                    sw.WriteLine(line)
                    count = count + 1
                End While
                ' close the files and report success
                sr.Close()
                sw.Close()
                Console.WriteLine("Copied " & count & " lines from " &
ipfile & " to " & opfile)
            Catch ex As Exception
                ' only get here if an error occurred
                Console.Error.WriteLine("Error: " & ex.Message)
                Console.Error.WriteLine("Error: ConsoleCopy fails.")
                Environment.Exit(1)
            End Try
        End If
    End Sub
End Module
```

```

/cygdrive/c/src/vbasic/ConsoleHello/ConsoleCopy/bin/Release
$ ConsoleCopy
usage: ConsoleCopy input.txt output.txt

Mark@xps /cygdrive/c/src/vbasic/ConsoleHello/ConsoleCopy/bin/Release
$ ConsoleCopy f.xml
usage: ConsoleCopy input.txt output.txt

Mark@xps /cygdrive/c/src/vbasic/ConsoleHello/ConsoleCopy/bin/Release
$ ConsoleCopy f.xml g.xml
Copied 11 lines from f.xml to g.xml

Mark@xps /cygdrive/c/src/vbasic/ConsoleHello/ConsoleCopy/bin/Release
$ ConsoleCopy h.xml g.xml
Error: Could not find file 'C:\src\vbasic\ConsoleHello\ConsoleCopy\bin\Release\h.xml'.
Error: ConsoleCopy fails.

Mark@xps /cygdrive/c/src/vbasic/ConsoleHello/ConsoleCopy/bin/Release
$ ConsoleCopy f.xml f.xml
Error: The process cannot access the file 'C:\src\vbasic\ConsoleHello\ConsoleCopy\bin\Release\f.xml' because it is being used by another process.
Error: ConsoleCopy fails.

Mark@xps /cygdrive/c/src/vbasic/ConsoleHello/ConsoleCopy/bin/Release
$

```