

The use of a buffered stream to serve as intermediate data holder for another stream



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/*
C# Programming Tips & Techniques
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*/
// BufStrm.cs – demonstrates the use of a buffered stream to
// serve
// as intermediate data holder for another stream.
//
// Compile this program with the following command line:
// C:>csc BufStrm.cs
using System;
using System.IO;

namespace nsStreams
{
public class BufStrm
{
static public void Main ()
{
FileStream strm;
try
{
strm = new FileStream (“./BufStrm.txt”,
FileMode.OpenOrCreate,
FileAccess.Write);
}
}
```

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catch (Exception e)
{
Console.WriteLine (e.Message);
Console.WriteLine ("Cannot open ./BufStrm.txt");
return;
}
strm.SetLength (0);
BufferedStream bstrm = new BufferedStream (strm);
string str = "Now is the time for all good men to " +
"come to the aid of their Teletype.
";
byte [] b;
StringToByte (out b, str);
bstrm.Write (b, 0, b.Length);
// Save the current position to fix an error.
long Pos = bstrm.Position;
Console.WriteLine ("The buffered stream position is "
+ bstrm.Position);
Console.WriteLine ("The underlying stream position is "
+ strm.Position);
str = "the quick red fox jumps over the lazy brown dog.
";
StringToByte (out b, str);
bstrm.Write (b, 0, b.Length);
Console.WriteLine ("
The buffered stream position is " +
bstrm.Position);
Console.WriteLine ("The underlying stream position is still "
+ strm.Position);
// Fix the lower case letter at the beginning of the second
string
bstrm.Seek (Pos, SeekOrigin.Begin);
b[0] = (byte) 'T';
bstrm.Write (b, 0, 1);
// Flush the buffered stream. This will force the data into
the
// underlying stream.
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bstrm.Flush ();
bstrm.Close ();
strm.Close ();
}
//
// Convert a buffer of type string to byte
static void StringToByte (out byte [] b, string str)
{
b = new byte [str.Length];
for (int x = 0; x < str.Length; ++x) { b[x] = (byte) str [x];
} } } } //File: BufStrm.txt /* Now is the time for all good
men to come to the aid of their Teletype. The quick red fox
jumps over the lazy brown dog. */ [/csharp]
```