

# Testing the effects of passing array references by value and by reference.

```
using System;
```

```
public class ArrayReferenceTest
{
public static void Main( string[] args )
{
int[] firstArray = { 1, 2, 3 };
int[] firstArrayCopy = firstArray;
for ( int i = 0; i < firstArray.Length; i++ ) Console.Write(
"{0} ", firstArray[ i ] ); FirstDouble( firstArray ); for (
int i = 0; i < firstArray.Length; i++ ) Console.Write( "{0} ",
firstArray[ i ] ); if ( firstArray == firstArrayCopy )
Console.WriteLine("same" ); else Console.WriteLine("different"
); int[] secondArray = { 1, 2, 3 }; int[] secondArrayCopy =
secondArray; for ( int i = 0; i < secondArray.Length; i++ )
Console.Write( "{0} ", secondArray[ i ] ); SecondDouble( ref
secondArray ); for ( int i = 0; i < secondArray.Length; i++ )
Console.Write( "{0} ", secondArray[ i ] ); if ( secondArray ==
secondArrayCopy ) Console.WriteLine("same" ); else
Console.WriteLine("different" ); } public static void
FirstDouble( int[] array ) { for ( int i = 0; i <
array.Length; i++ ) array[ i ] *= 2; array = new int[] { 11,
12, 13 }; } public static void SecondDouble( ref int[] array )
{ for ( int i = 0; i < array.Length; i++ ) array[ i ] *= 2;
array = new int[] { 11, 12, 13 }; } } [/csharp]
```