**Assigning Array References**

* As with other objects, when you assign one array reference variable to another, you are

simply making both variables refer to the same array.

* You are neither causing a copy of the array to be created, nor are you causing the contents of one array to be copied to the other.

**For example, consider this program:**

// Assigning array reference variables.

using System;

class AssignARef

{

public static void Main()

{

int i;

int[] nums1 = new int[10];

int[] nums2 = new int[10];

for(i=0; i < 10; i++) nums1[i] = i;

for(i=0; i < 10; i++) nums2[i] = -i;

Console.Write("Here is nums1: ");

for(i=0; i < 10; i++)

Console.Write(nums1[i] + " ");

Console.WriteLine();

Console.Write("Here is nums2: ");

for(i=0; i < 10; i++)

Console.Write(nums2[i] + " ");

Console.WriteLine();

nums2 = nums1; // now nums2 refers to nums1

Console.Write("Here is nums2 after assignment: ");

for(i=0; i < 10; i++)

Console.Write(nums2[i] + " ");

Console.WriteLine();

// Next, operate on nums1 array through nums2.

nums2[3] = 99;

Console.Write("Here is nums1 after change through nums2: ");

for(i=0; i < 10; i++)

Console.Write(nums1[i] + " ");

Console.WriteLine();

}

}

**The output from the program is shown here:**

Here is nums1: 0 1 2 3 4 5 6 7 8 9

Here is nums2: 0 -1 -2 -3 -4 -5 -6 -7 -8 -9

Here is nums2 after assignment: 0 1 2 3 4 5 6 7 8 9

Here is nums1 after change through nums2: 0 1 2 99 4 5 6 7 8 9

As the output shows, after the assignment of **nums1** to **nums2**, both array reference variables refer to the same object.