

## Không Đệ Quy

The screenshot shows the Visual Studio IDE with a C# project named "Buoi3\_Bai1". The code in the "Program.cs" file defines a non-recursive method to calculate the sum of an array. The "Main" method initializes an array and calls "SumArrayNonRecursive". The "SumArrayNonRecursive" method uses a loop to calculate the sum.

```
internal class Program
{
    static void Main(string[] args)
    {
        int[] arr = { 1, 2, 3, 4, 5, 6 };
        int sum = SumArrayNonRecursive(arr);
        Console.WriteLine("Tong cua mang la: " + sum);
        Console.ReadLine();
    }

    static int SumArrayNonRecursive(int[] arr)
    {
        int sum = 0;
        for (int i = 0; i < arr.Length; i++)
        {
            sum += arr[i];
        }
        return sum;
    }
}
```

The "Autos" window shows the following variables:

Name	Value	Type
arr	(int[6])	QView<int[]
arr.Length	6	int
i	0	int
sum	0	int

The "Error List" window shows 0 errors and 0 warnings.

## Đệ Quy

The screenshot shows the Visual Studio IDE with a C# project named "Buoi3\_Bai1\_DeQuy". The code in the "Program.cs" file defines a recursive method to calculate the sum of an array. The "Main" method initializes an array and calls "SumArrayRecursive". The "SumArrayRecursive" method uses recursion to calculate the sum.

```
static void Main(string[] args)
{
    int[] arr = { 1, 2, 3, 4, 5, 6 };
    int sum = SumArrayRecursive(arr, 0, arr.Length - 1);
    Console.WriteLine("Tong cua mang la: " + sum);
    Console.ReadLine();
}

static int SumArrayRecursive(int[] arr, int left, int right)
{
    if (left == right)
        return arr[left];

    int mid = (left + right) / 2;
    int leftSum = SumArrayRecursive(arr, left, mid);
    int rightSum = SumArrayRecursive(arr, mid + 1, right);
    return leftSum + rightSum;
}
```

The "Autos" window shows the following variables:

Name	Value	Type
SumArrayRecursive	(Method = [Int32 SumArrayRecursive(Int32[], Int32, Int32)])	Object (System.Func<int[], int, int, int>)
arr	(int[6])	QView<int[]
left	0	int
leftSum	0	int
mid	2	int
right	5	int

The "Error List" window shows 0 errors and 0 warnings.