First Arrays Manipulations

https://csci-1301.github.io/about#authors

June 1, 2021 (01:00:29 AM)

Contents

1 First Array Manipulation

Write a program that

1. declares an array `myArray` of `int` of size 5,
2. initializes `myArray` with the values 1, 2, 3, 4 and 5,
3. displays the content of `myArray`.

Now, let us write *incorrect* statements. Add the following statements one by one to your program, observe how C# reacts (that is, try to compile and execute after you add one, then remove it), and answer the following questions.

```
myArray = { 1, 2 ,3, 4, 5};
Console.WriteLine(myArray[5]);
myArray[5] = 12;
Console.WriteLine(myArray);
```

- One of these statements is not "incorrect" in the sense that it won't prevent your program from executing, but it is not doing what you would have expected: which one?
- Can you read and understand the error messages you obtained for the others?

2 Second Array Manipulation

Write a program that

1. declares an array `myArray` of `int` of size 10,
2. initializes `myArray` with the values 1, 2, 3, ..., 9 and 10,
3. displays the content of `myArray`.
4. sums the values stored in `myArray` and displays the result.
5. computes the product of the values stored in `myArray` and displays the result.

3 Pushing Further (Optional)

3.1 Default values

Execute the following:

```
int[] ar = new int[5];
ar[0] = 5;
for (int i = 0; i < ar.Length; i++)
    Console.WriteLine(ar[i]);
```

What can you conclude about the value of the array cells that were not assigned?