Assignment 2:

Questions&answers:

1. When to use String vs. StringBuilder in C#?

String: Use String when the text is immutable (does not change). Every modification to a String object creates a new object, which can be inefficient when frequent changes are required in the task.

StringBuilder: Use StringBuilder when we need to modify a string frequently, such as appending, removing, or inserting characters.

2. What is the base class for all arrays in C#?

The base class for all arrays in C# is System.Array.

3. How do you sort an array in C#?

sort an array using the Array.Sort() method.

4. What property of an array object can be used to get the total number of elements in an array?

The Length property of an array can be used to get the total number of elements in an array.

5.Can you store multiple data types in System.Array?

No, System.Array is a collection of elements of the same type. But, an array of object type can store multiple data types, eg: object[] advancedArray = { 's', 1,1.23,};

6. What's the difference between the System.Array.CopyTo() and System.Array.Clone()?

Array.CopyTo(): Copies all the elements of the current array to another existing array starting at the specified index of the target array. It performs a shallow copy.

Array.Clone(): Creates a new array containing all the elements of the original array. It performs a shallow copy and returns an object that needs to be cast to the appropriate type.