String

- String is considered as an array of characters in all programming languages.
- In C#, String is considered as an independent data type.
- A string is an object of type String whose value is text.
- Internally, the text is stored as a sequential read-only collection of Char objects. In case of C and C++, there is a null character i.e. '\0' at the end of string.
- There is no null-terminating character at the end of a C# string; therefore a C# string can contain any number of embedded null characters ('\0'). The Length property of a string represents the number of Char objects it contains, not the number of Unicode characters.
- To access the individual Unicode code points in a string, use the StringInfo object.

string vs. System.String

- In C#, the string keyword is an alias for String.
- Therefore, string and String are equivalent, and you can use whichever naming convention you prefer.
- The String class provides many methods for safely creating, manipulating, and comparing strings.
- In addition, the C# language overloads some operators to simplify common string operations.