**STRINGS IN C#**

**DEFINITION**: String is a class representing a read-only text it can be used to manipulate its contents and perform operations such as concatenation, search, comparison, sorting, formatting, copying and displaying.

**FEATURES**: There are two properties of string class:

1. Chars: It is used to get the char object at the user specified position
2. Length: It is used to get the number of characters in the string

**EXAMPLES**: using System;

namespace ExampleString {

class Test {

public static void Main(string [] args) {

// create string

string str1 = "C# Programming";

string str2 = "Assignment";

// print string

Console.WriteLine(str1);

Console.WriteLine(str2);

Console.ReadLine();

}

}

}

**QUESTION AND ANSWERS**

1Q. What is a string in C# and what are its types

In c#, the string is a keyword that is useful to represent a sequential collection of characters called a text, and the string is an object of the System.String type.There are two types of string in C#:

1. Immutable strings

2. Mutable strings

2Q.Difference between mutable and immutable strings?

Mutable strings are those strings, which can be modifying dynamically. This type of strings are created using StringBuilder class.

The immutable strings are can’t be modify while mutable strings are modifiable.C# also supports a feature of regular expressionthat can be used for complex strings manipulations and pattern matching.

3Q. What are sub strings?

A substring is any sequence of characters that is contained in a string. Substring method is used to create a new string from the original string. Using IndexOf method, one or more occurrences of substrings can be searched. The Replace method is used to replace all occurrences of a specified substring with a new string.

4Q.Name some string functions and its definition

IndexOf() – Return the index position of first occurrence of specified character.

Replace() – This method replaces the character.

Remove()- This method deletes characters from beginning to specified index position.

Length – String property that returns length of string.

CompareTo()- Compare two strings and returns integer value as output. Returns 0 for true and 1 for false.

5Q. List the methods that can return new string objects?

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| String.Format | Builds a formatted string from a set of input objects. |
| String.Concat | Builds strings from two or more strings. |
| String.Join | Builds a new string by combining an array of strings. |
| String.Insert | Builds a new string by inserting a string into the specified index of an existing string. |
| String.CopyTo | Copies specified characters in a string into a specified position in an array of characters. |