1. How to declare a string in Java?

String declaration in Java can be done in two ways:

- **By string literal**: Double quotes are used to create Java String literals.
    - Example: String str= "Scaler";
- **By new keyword**: Keyword "new" is used to create a Java string.

2. Is String a primitive or derived type in Java?

Strings are derived data types. Strings are Java objects that represent sequences of characters. String objects are created using the java.lang.String class. There are many functions that need to be called upon when processing a string, such as substring(), indexof(), equals(), toUppercase(), etc, which primitives types do not have

3. What are the different string methods in Java?

There are various string operations in Java that allow us to work with strings. These methods or operations can be used for string handling in Java as well as string manipulation in Java. Some of such methods are as follows:

- **split()**: Split/divide the string at the specified regex.
- **compareTo()**: Compares two strings on the basis of the Unicode value of each string character.
- **compareToIgnoreCase()**: Similar to compareTo, but it also ignores case differences.
- **length()**: Returns the length of the specified string.
- **substring()**: Returns the substring from the specified string.
- **equalsIgnoreCase()**: Compares two strings ignoring case differences.
- **contains()**: Checks if a string contains a substring.
- **trim()**: Returns the substring after removing any leading and trailing whitespace from the specified string.
- **charAt()**: Returns the character at specified index.
- **toLowerCase()**: Converts string characters to lower case.
- **toUpperCase()**: Converts string characters to upper case.
- **concat()**: Concatenates two strings.

4. How Can You Make a String Uppercase and Lowercase in java ?

You can use the `String` class `toUpperCase` and `toLowerCase` methods to get the `String` object in all upper case or lower case. These methods have a variant that accepts

a `Locale` argument and use the rules of the given locale to convert the string to upper or lower case.

5. What is the String Subsequence Method in java ?

Java 1.4 introduced the `CharSequence` interface and the `String` class implements this interface, which is why the `String` class has the `subSequence` method. Internally, the `subSequence` method invokes the `String substring` method.

6. Can You Use String in Switch case in Java?

Java 7 extended the capability of switch case to `Strings`; earlier Java versions don't support this. If you're implementing conditional flow for strings, you can use if-else conditions and you can use switch case if you are using Java 7 or higher versions. Learn more about Java switch case string.

7. What is the String Pool in java ?

The string pool is a pool of `String` objects stored in Java heap memory. `String` is a special class in Java and you can create a `String` object using the `new` operator as well as by providing values in double quotes. Learn more about the Java string pool.

8. How to compare two strings in java?

We can compare two strings using the equals() method. Another method is to use the '==' operator but try to avoid this method to compare two strings.
The reason behind this 'equals()' method compares the values of the two strings, whereas the '==' operator compares the reference in the memory.

```
String S1 = "coding ninjas";
String S2 = new String("coding ninjas");
System.out.println(S1==S2); // returns false
System.out.println(S1.equals(S2)); // return true
```

9. Difference between string in C and string in java.

- C string is a null-terminated character array whereas String in Java is an object.
- String objects in java allow us to call various methods like substring(), toLowerCase(), length().

10.How many string functions are there?

The String class in Java provides many built-in methods for manipulating and interacting with strings. These comprise techniques for string concatenation, formatting, character extraction, comparison, splitting, case conversion, replacement, and more.

11.Why is string function used?

String functions are used to make our code effective and simple because they are already developed and ready to use. The header file string defines the string handling functions. They can be used to concatenate string, compare, search, replace, and extract substrings from strings.

12.What is the main purpose of strings in Java?

Strings in Java are mostly used to represent a group of characters. Java programming makes considerable use of string for text processing and data manipulation. They are an effective tool for Java developer because they are immutable, simple, and provide a wide range of methods for working with string.