8. Arrays And String..

1. One-Dimensional and Multidimensional Arrays.

Answer:- Array: is a group of elements which can store multiple value/object in a single variable with same data types.

Store=length-1 (size-1)size=5(0 to 4)

:index start from 0

:If you store upon 5th index then occur

Exception

:Array index out of bound exception

: There are mainly 2types

1. One dimensional: [] : at a time only one loop will be use
2. Two or more dimensional: [][] or [][][] : loop with in loop will be used
3. Jagged Array or Ragged Array: Array with in Array

: Each row having different column i.e.

: Its same like 2D array but row must be assigned but again column will be empty

Example:

1 2 3 4 5   
1 2 3

1 2 3 4

1. String Handling in Java: String Class, String Buffer, String Builder

Answer:

1. String Class

The String class is used to create and manipulate immutable strings. Once a String object is created, it cannot be modified.

1. String Buffer Class

The String Buffer class is used to create and manipulate mutable strings in a thread-safe manner.

1. String Builder Class

The String Builder class is similar to String Buffer but is not thread-safe. It offers better performance for single-threaded applications.

1. Array of Objects

Answer: In Java, an array of objects is a collection of references to objects. Each element in the array can store a reference to an object of the specified type. This is useful when you need to manage multiple objects in a structured way.

1. You declare an array of objects similar to arrays of primitive types.
2. Create the array using the new keyword, specifying the size.
3. String Methods (length, charAt, substring, etc.)

Answer: The String class in Java provides numerous methods to manipulate and analyze strings.

Length: Returns the number of characters in the string.

charAt: Returns the character at the specified index

Substring(int beginIndex): Returns a substring starting from the specified index to the end.

Substring(int beginIndex , int endIndex): Returns a substring starting from beginIndex to endIndex - 1.