Q1) What is a String in Java?

Answer: In Java, String is basically collection of different-different types character. or string is basically an object that represents sequence of char values.

An array of characters works same as Java string

Q2) Types of String in Java are?

Answer: In Java String are two types-

a) Immutable

b) Mutable

Q3) In how many ways can you create string object in java?

Answer: There are two ways to create a String object.

a) By string literal: Java String literal is created by using diuble quotes.

for ex.: String s = "Welcome";

b) By new keyword: Java String is created by using a keyword "new".

for ex. : String s = new String("Welcome");

Q4) What is a String constant pool?

Answer: The String constant pool is a special memory area in Java Heap memory where string literals are stored.

When we declare a String leteral(like - String s1 = "Welcome";), the JVM creates the object in the 'string constant pool' and stores its reference on the stack.

Before creating each String object in memory, the JVM checks if the same value exists in the string constant pool are not.

if yes, it occupies the already existing value.

if no, it create a new string object and adds it to the string constant pool.

String constant pool also occupies the copy of string object that are persent in Heap memory.

Q5) What do you mean by mutable and immutable objects?

Answer: Mutable: A mutable object can be changed after it's created.

 Immutable: Immutable object can not be changed once String object is created.

Q6) Where exactly is the string constant pool located in the memory?

Answer: String constant pool belongs to the Heap memory.