1. What is a String in Java?
   Answer: In Java, a string is a sequence of characters enclosed by a double quote ("").
   Strings are immutable in Java, which means that once a 'String' object is created, its
   contents cannot be changed. Instead, any operation that modifies 'String' will result in a
   new 'String' object being created.

   Strings are commonly used in Java for representing text data, such as names,
   addresses, sentences, etc.

2. Types of String in Java are?
   Answer: There are two types of string in Java on the basis of updation of string:
   a. Mutable String (String)
   b. Immutable String (SringBuilder, StringBuffer)

3. In how many ways can you create string objects in Java?
   Answer: We can create strings in ways:
   a. Using string literal:
      String name = "Aditya Ghosh";
      It creates a string object inside the string constant pool which is present inside
      heap memory.
   b. Using the 'new' keyword:
      String name = new String("Aditya Ghosh");
      It creates a string object outside of the string constant pool but inside heap
      memory.

4. What is String Constant Pool?
   Answer: String Constant Pool is a storage space in heap memory where string literals
   are stored. It does not allow duplicate values. Its size is fixed, can't be expanded on
   runtime, and is not eligible for garbage collection. It ensures all the string literal with the
   same value refer to the same object in memory, which conserves memory and improve
   performance.

5. What do you mean by mutable and immutable objects?
   Answer:
   Immutable Object: An object is considered immutable if its state cannot be modified after
   it is created. This means that any operation on an immutable object will result in a new
   object being created rather than changing the original object.
   Mutable: Mutable objects are types of an object that can't be changed once assigned.
   Examples: numbers, strings, characters, etc.

   Mutable Object: A mutable object is an object whose state can be changed after it is
   created. Examples: arrays, lists, sets, maps, etc.

6. Where exactly is the string constant pool is located in the memory?

Answer: The string constant pool is located in the method area of the Java Virtual Machine(JVM) memory.