1. What is a String in Java?
Ans: A string is a collection of characters that are enclosed by a double quote(""). It refers to a class in Java so when using a String, we need to create an object of the String class. String class is defined inside the lang package of Java, i.e, String is an inbuilt class in Java.
Example: String name = "John"; // name is a String object which holds the value, John.

2. Types of String in Java are?
Ans: There are 2 types of String in Java, namely, Immutable and Mutable Strings. Immutable means that once the String object is created, its value cannot be changed/modified in the future in any case, if we try to perform a change, a new object will be created. Mutable means that the String object's value can be modified to any extent, the changes will get reflected in the same object.
Example:
String name = "John"; // this creates an Immutable String
StringBuilder name = new StringBuilder("Doe"); // this creates a Mutable String
StringBuffer name = new StringBuffer("Doe"); // this creates a Mutable String

3. In how many ways can you create string objects in Java?
Ans: String objects in Java can be created in 3 ways:
i. By using the String class and assigning a String value directly
String name = "John";
ii. By using the String class and using the new keyword
String name = new String("John");
iii. By creating a character array first and then using the new keyword to assign this character array to a String object
char ch[] = {'J', 'o', 'h', 'n'};
String name = new String(ch);

4. What is a string constant pool?
Ans: String Constant Pool is a special memory location inside the Heap Area of the JVM Data Area. In Java, a String object, when created without using the new keyword gets stored in the String Constant Pool. It does not allow creation of duplicate objects, meaning that there is no way that two objects are having the same value inside the String Constant Pool. All objects created in the String Constant Pool will be destroyed only at the time of JVM ShutDown.

5. What do you mean by mutable and immutable objects?
Ans: Mutability means the ability to mutate or change. So when we use this term for objects, it signifies whether the object's values can be changed or not. Mutable objects are such objects whose values can be changed by any operation on them, a new object is not created and change will get reflected on the same object. Immutable objects are such objects whose values cannot be changed by any operation on them, if we try to change, then a new object will be created and the changes will get reflected on the new object.

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

Ans: String Constant Pool is a special memory location that is located inside the Heap Area of the JVM Data Area where String literals are stored. It is privately maintained by the Java String class. When we declare a String literal, the JVM creates the object in the pool and stores its reference on the stack.