# Assignment 11

Ans 1. **Strings** are the types of object that can store the character of values. It is a sequence of characters that exists as an object. These can be created and manipulated through the string class.

Ans 2.Strings are of **two** types:

- **Mutable strings**: If a string is created using **"stringBuffer"** or **"stringBuilder" ,** and on that string object itself, any operations are performed then, the string is called mutable string.
- **Immutable strings**: If a string is created using **"string"** , and any operations are performed , then in the memory a new string object will be created and the resultant string will store in that ,the string is called immutable string.

Ans 3. We can create string objects as:

- **By using string literal** -> Java string literal is created by using double quotes.

  For example: String str ="hello";

- **By using new keyword**-> Java string is created using a keyword "new".
  For example: String str= new String("hello");
  This will create two objects , one in string pool and in heap.

Ans 4. **String pool** is a storage space in the java heap memory where string literals are stored .It is also known as String constant pool or string intern pool. It is privately maintained by java string class.

Using **string constant pool** , we can create only one copy of object and can reuse it  , this improves the performance and memory utilization.

**Ans  5** .**Mutable objects** are those objects whose state can be changed after they have been created, whereas **Immutable objects** are those whose states cannot be changed after they have been created.

**Ans  6**.String constant pool is the storage space in the **"Java heap memory"** where string literals are stored.