String and StringBuffer Class

String Class

In java, string is basically an object that represents sequence of char values. An array of characters works same as java string. For example:

```
char[] ch={'j','a','v','a'};
String s=new String(ch);
is same as:
String s="java";
```

How to create String object?

There are two ways to create String object:

- 1. By string literal
- 2. By new keyword

1) String Literal

Java String literal is created by using double quotes. For Example:

```
String s="welcome";
```

2) By new keyword

```
String s=new String("Welcome");
```

Java String class methods

The java.lang.String class provides many useful methods to perform operations on sequence of char values.

| Method | Description |
|----------------------------------|---|
| char charAt(int index) | returns char value for the particular index |
| int length() | returns string length |
| String substring(int beginIndex) | returns substring for given begin index |

| String substring(int beginIndex, int endIndex) | returns substring for given begin index and end index |
|--|---|
| boolean equals(Object another) | checks the equality of string with object |
| String concat(String str) | concatinates specified string |
| String replace(char old, char new) | replaces all occurrences of specified char value |
| String replace(CharSequence old, CharSequence new) | replaces all occurrences of specified CharSequence |
| String[] split(String symbol) | returns splitted string matching symbol |
| String toLowerCase() | returns string in lowercase. |
| String toUpperCase() | returns string in uppercase. |

StringBuffer class

Java StringBuffer class is used to create mutable (modifiable) string. The StringBuffer class in java is same as String class except it is mutable i.e. it can be changed.

Important Constructors of StringBuffer class

| Constructor | Description |
|----------------------------|---|
| StringBuffer() | creates an empty string buffer with the initial capacity of 16. |
| StringBuffer(String str) | creates a string buffer with the specified string. |
| StringBuffer(int capacity) | creates an empty string buffer with the specified capacity as length. |

Methods of StringBuffer class

| Method | Description |
|---|---|
| append(String s) | is used to append the specified string with this string. The append() method is overloaded like append(char), append(boolean), append(int), append(float), append(double) etc. |
| insert(int offset, String s) | is used to insert the specified string with this string at the specified position. The insert() method is overloaded like insert(int, char), insert(int, boolean), insert(int, int), insert(int, float), insert(int, double) etc. |
| replace(int startIndex, int endIndex, String str) | is used to replace the string from specified startIndex and endIndex. |
| delete(int startIndex, int endIndex) | is used to delete the string from specified startIndex and endIndex. |
| reverse() | is used to reverse the string. |
| charAt(int index) | is used to return the character at the specified position. |
| length() | is used to return the length of the string i.e. total number of characters. |
| substring(int beginIndex) | is used to return the substring from the specified beginIndex. |
| substring(int beginIndex, int endIndex) | is used to return the substring from the specified beginIndex and endIndex. |

Reference Website:

https://www.javatpoint.com/java-string