JAVA

Class 14

Agenda

String Manipulations

String Methods

String replace(char oldChar, char newChar)

Description:

This method returns a new string resulting from replacing all occurrences of oldChar in this string with newChar.

Syntax:

Here is the syntax of this method:

public String replace(char oldChar, char newChar)

Example

```
public class Test {
 public static void main(String args[]) {

      String Str = new String("Welcome on Board");
       System.out.print("Return Value :" );
      System.out.println(Str.replace('o', 'T'));
      System.out.print("Return Value :" );
      System.out.println(Str.replace('a', 'D'));
  }
}
```

Output:

Return Value :WelcTme Tn BTard

Return Value :Welcome to BoDrd

String Methods

String replaceAll(String regex, String replacement)

Description:

This method replaces each substring of this string that matches the given regular expression with the given replacement.

Syntax:

Here is the syntax of this method:

public String replaceAll(String regex, String replacement)

Regular Expression

A regular expression defines a search pattern for strings.

The search pattern can be anything from a simple character, a fixed string or a complex expression containing special characters describing the pattern.

[A-Z] will look for all character from A-Z in the string

[a-z] will look for all character from a-z in the string

[0-9] will look for all numbers from 0-9 in the string

[^abc] will look for any character except a, b, or c in the string

Example

```
public class StringReplace {

   public static void main(String[] args) {

       String mix="3213Hello 89 World354545 *&***^&*^&*";

       System.out.println(mix.replaceAll("[0-9]", ""));

       System.out.println(mix.replaceAll("[a-z]", ""));

       System.out.println(mix.replaceAll("[a-z A-Z]", ""));

       System.out.println(mix.replaceAll("[^A-Za-z0-9]", ""));
   }
}
```

String Methods

char[] toCharArray()

Description:

This method converts this string to a new character array.

Syntax:

Here is the syntax of this method:

public char[] toCharArray()

Example

```
public static void main(String[] args) {

String name="Syntax Technologies";

char[] array=name.toCharArray();//array={'S', 'y', 'n', 't', 'a', 'x'}

System.out.println(array.length);

//System.out.println(array[1]); printing 1 value

        for (int i=0; i<array.length; i++) {
                System.out.println(array[i]);
        }
}
```

String Methods

String[] split(String regex)

Description:

This method splits this string around matches of the given regular expression.

Syntax:

Here is the syntax of this method:

```
public String[] split(String regex)
```

Example

how can you find how many words are in the string?

String subject="I love Java and I want to learn more";

Using space “ ” as a delimiter
Split returns an array of Strings

```
String [] splittedSub = subject.split(" ");

System.out.println(splitedSub.length);

Looping through the array to get all the values
for (int i = 0; i< splitedSub.length; i++) {
        System.out.println(splittedSub[i]);
}
```

Task

1. Create a String that will hold a sentence. Write a program to get a new String without any spaces.

2. Create a String that should be combination of letters, numbers and special characters. Find out how many alpha characters are there in the String.

3. You have a String a=”Is it saturday? Is it raining? Do we have a Java Class today?” How would you find out how many sentences are in that String?