**Java String Examples [Writing version-Trebuchet MS]**

* The String class is immutable (constant), i.e. Strings in java, once created and initialized, cannot be changed.
* The String is a final class, no other class can extend it, and you cannot change the state of the string.
* String values cannot be compare with '==', for string value comparision, use equals() method.
* String class supports various methods, including comparing strings, extracting substrings, searching characters & substrings, converting into either lower case or upper case, etc.

# String Initialization Sample Code

You can create and initialize string object by calling its constructor, and pass the value of the string. Also you can pass character array to the string constructor. You can also directly assign string value to the string reference, which is equals to creating string object by calling constructor. The empty string constructor will create string object with empty value.

**package com.myjava.string;**

**public class MyStringInitialization {**

**public static void main(String a[]){**

**String abc = "This is a string object";**

**String bcd = new String("this is also string object");**

**char[] c = {'a','b','c','d'};**

**String cdf = new String(c);**

**String junk = abc+" This is another String object";**

**}}**

# How to convert Character array to String object?

By using String.copyValueOf() method you can convert char array to string object. Also you can copy range of character array to string.

**package com.myjava.string;**

**public class MyArrayCopy {**

**public static void main(String a[]){**

**char ch[] = {'M','y',' ','J','a','v','a',' ','e','x','a','m','p','l','e'};**

**/\*\***

**\* We can copy a char array to a string by using**

**\* copyValueOf() method.**

**\*/**

**String chStr = String.copyValueOf(ch);**

**System.out.println(chStr);**

**/\*\***

**\* We can also copy only range of charactors in a**

**\* char array by copyValueOf() method.**

**\*/**

**String subStr = String.copyValueOf(ch,3,4);**

**System.out.println(subStr);**

**}}**

# How to appent or concat two Strings in java?

# Different ways of append or concat two string objects. You can append two strings by just using "+" sign. Also you can concatinate two string objects by calling concat() method.

**package com.myjava.string;**

**public class MyStringConcat {**

**public static void main(String a[]){**

**String b = "jump ";**

**String c = "No jump";**

**/\*\***

**\*  We can do string concatination by two ways.**

**\*  One is by using '+' operator, shown below.**

**\*/**

**String d = b+c;**

**System.out.println(d);**

**/\*\***

**\*  Another way is by using concat() method,**

**\*  which appends the specified string at the end.**

**\*/**

**d = b.concat(c);**

**System.out.println(d);**

**}**

**}**

# How to compare two String objects in java?

To compare two string objects in java. You can not use "==" operator to compare two strings. String provides equals() method to compare two string objects. Also you can ignore case during string compare by calling equalsIgnoreCase() method. '==' operator compares the object reference but not the string value.

**package com.myjava.string;**

**public class MyStringEquals {**

**public static void main(String a[]){**

**String x = "JUNK";**

**String y = "junk";**

**/\*\***

**\* We cannot use '==' operator to compare two strings.**

**\* We have to use equals() method.**

**\*/**

**if(x.equals(y)){**

**System.out.println("Both strings are equal.");**

**} else {**

**System.out.println("Both strings are not equal.");**

**}**

**/\*\***

**\* We can ignore case with equalsIgnoreCase() method**

**\*/**

**if(x.equalsIgnoreCase(y)){**

**System.out.println("Both strings are equal.");**

**} else {**

**System.out.println("Both strings are not equal.");**

**}}}**

Both strings are not equal.

Both strings are equal

# How to compare StringBuffer object to String object in java?

To compare StringBuffer object with String object. String object provides contentEquals() method to compare content with a StringBuffer object.

**package com.myjava.string;**

**public class MyStringComp {**

**public static void main(String a[]){**

**String c = "We are comparing the content with a StringBuffer content";**

**StringBuffer sb =**

**new StringBuffer("We are comparing the content with a StringBuffer content");**

**/\*\***

**\* We can use contentEquals() method to compare content with a StringBuffer.**

**\* It returns boolean value.**

**\*/**

**if(c.contentEquals(sb)){**

**System.out.println("The content is equal");**

**} else {**

**System.out.println("The content is not equal");**

**}**

**StringBuffer asb =**

**new StringBuffer("You cannot compare the content with a String content");**

**if(c.contentEquals(asb)){**

**System.out.println("The content is equal");**

**} else {**

**System.out.println("The content is not equal");**

**}}}**

The content is equal

The content is not equal

# How to get byte array from a string object in java?

Some times we have to convert string object into byte array. You can use getBytes() method to convert string object to byte array.

**package com.myjava.string;**

**public class MyStringBytes {**

**public static void main(String a[]){**

**String str = "core java api";**

**byte[] b = str.getBytes();**

**System.out.println("String length: "+str.length());**

**System.out.println("Byte array length: "+b.length);**

**}}**

String length: 13

Byte array length: 13

# How to get index of a character or string from another String in java?

To get index of a specified character or string from the given string. By using indexOf() method you get the position of the specified string or char from the given string. You can also get the index string /starting from a specified position of the string.

**package com.myjava.string;**

**public class MyStringIndexOf {**

**public static void main(String[] a){**

**String str = "Use this string for testing this";**

**System.out.println("Basic indexOf() example");**

**System.out.println("Char 's' at first occurance: "+str.indexOf('s'));**

**System.out.println("String \"this\" at first occurance: "+str.indexOf("this"));**

**/\*\***

**\* Returns the first occurance from specified start index**

**\*/**

**System.out.println("First occurance of char 's' from 4th index onwards : "**

**+str.indexOf('s',4));**

**System.out.println("First occurance of String \"this\" from 6th index onwards: "**

**+str.indexOf("this",6));**

**}}**

Basic indexOf() example

Char 's' at first occurance: 1

String "this" at first occurance: 4

First occurance of char 's' from 4th index onwards : 7

First occurance of String "this" from 6th index onwards: 28

# Java String lastIndexOf() Sample Code

To get index of a given character or string from a string in the reverse order, means last occuring index. By using lastIndexOf() method you can get last occurence of the the reference string or character. Also lastIndexOf() method gives last occurence based on a specific position.

**package com.myjava.string;**

**public class MyStrLastIndexOf {**

**public static void main(String a[]){**

**String str = "Use this string for testing this";**

**System.out.println("Basic lastIndexOf() example");**

**System.out.println("Char 's' at last occurance: "+str.lastIndexOf('s'));**

**System.out.println("String \"this\" at last occurance: "+str.lastIndexOf("this"));**

**/\*\***

**\* Returns the last occurance from specified start index,**

**\* searching backward starting at the specified index.**

**\*/**

**System.out.println("first occurance of char 's' from 24th index backwards: "**

**+str.lastIndexOf('s',24));**

**System.out.println("First occurance of String \"this\" from 26th index backwards: "**

**+str.lastIndexOf("this",26));**

**}}**

Basic lastIndexOf() example

Char 's' at last occurance: 31

String "this" at last occurance: 28

first occurance of char 's' from 24th index backwards: 22

First occurance of String "this" from 26th index backwards: 4

# How to find a string start with another string value in java?

To find whether a string value start with another string value. By using startsWith() method, you can get whether the string starts with the given string or not. Also this method tells that the string occurrence at a specific position.

**package com.myjava.string;**

**public class MyStrStartsWith {**

**public static void main(String a[]){**

**String str = "This is an example string.";**

**System.out.println("Is this string starts with \"This\"? "**

**+str.startsWith("This"));**

**System.out.println("Is this string starts with \"is\"? "**

**+str.startsWith("is"));**

**System.out.println("Is this string starts with \"is\" after index 5? "**

**+str.startsWith("is", 5));**

**}}**

Is this string starts with "This"? true

Is this string starts with "is"? false

Is this string starts with "is" after index 5? true

# How to find a string ends with another string value in java?

To find whether a string value ends with another string value. By using endsWith() method, you can get whether the string ends with the given string or not. Also this method tells that the string occurrence at a specific position.

**package com.myjava.string;**

**public class MyStringEnd {**

**public static void main(String a[]){**

**String str = "This is a java string example";**

**if(str.endsWith("example")){**

**System.out.println("This String ends with example");**

**} else {**

**System.out.println("This String is not ending with example");**

**}**

**if(str.endsWith("java")){**

**System.out.println("This String ends with java");**

**} else {**

**System.out.println("This String is not ending with java");**

**}}}**

This String ends with example

This String is not ending with java

# How to brake or split a string with a delimiter in java?

# To split or brake a string. The split() method splits the string based on the given regular expression or delimiter, and returns the tokens in the form of array. Below example shows splitting string with space, and second split is based on any kind of spaces, that includes tab, enter, line breaks, etc.

**package com.myjava.string;**

**public class MyStrSplit {**

**public static void main(String a[]){**

**String str = "This program splits a string based on space";**

**String[] tokens = str.split(" ");**

**for(String s:tokens){**

**System.out.println(s);**

**}**

**str = "This     program  splits a string based on space";**

**tokens = str.split("\\s+");**

**}}**

# This program splits a string based on space

# How to extract Char Array From String in java?

# To copy range of characters from the given string to another character array. By suing getChars() method, you can copy range of characters from the given string.

**package com.myjava.string;**

**public class MyCharArrayCopy {**

**public static void main(String a[]){**

**String str = "Copy chars from this string";**

**char[] ch = new char[5];**

**/\*\***

**\* The getChars() method accepts 4 parameters**

**\* first one is the start index from string**

**\* second one is the end index from string**

**\* third one is the destination char array**

**\* forth one is the start index to append in the**

**\* char array.**

**\*/**

**str.getChars(5, 10, ch, 0);**

**System.out.println(ch);**

**}}**

chars

# How to replace string characters in java?

To get replace character or a string into a string with the given string. String provides replace() method to replace a specific character or a string which occurs first. replaceAll() method replaces a specific character or a string at each occurrence.

**package com.myjava.string;**

**public class MyStringReplace {**

**public static void main(String a[]){**

**String str = "This is an example string";**

**System.out.println("Replace char 's' with 'o':"**

**+str.replace('s', 'o'));**

**System.out.println("Replace first occurance of string\"is\" with \"ui\":"**

**+str.replaceFirst("is", "ui"));**

**System.out.println("Replacing \"is\" every where with \"no\":"**

**+str.replaceAll("is", "no"));**

**})**

Replace char 's' with 'o':Thio io an example otring

Replace first occurance of string"is" with "ui":Thui is an example string

Replacing "is" every where with "no":Thno no an example string

# How to change case of a string characters in Java?

# To convert the case of a given string. toUpperCase() method converts all string characters to upper case. toLowerCase() method converts all string characters to lower case.

**package com.myjava.string;**

**public class MyStringCase {**

**public static void main(String a[]){**

**String str = "Change My Case";**

**System.out.println("Upper Case: "+str.toUpperCase());**

**System.out.println("Lower Case: "+str.toLowerCase());**

**}**

**}**

Upper Case: CHANGE MY CASE

Lower Case: change my case

# How to trim spaces in the given string in java?

To trim spaces in the given string. The trim() function removes all kind of space characters at both ends, means removes starting and trailing spaces. These space characters includes normal space, enter, new line, tab, etc.

**package com.myjava.string;**

**public class MyStringTrim {**

**public static void main(String a[]){**

**String str = "  Junk   ";**

**System.out.println(str.trim());**

**}**

**}**

Junk

# How to format given string in java?

String.format() method helps us to format the given string. It replaces each format item in a specified string with the text equivalent of a corresponding object's value. Example can explain more:

**package com.myjava.string;**

**import java.util.Locale;**

**public class MyStringFormatter {**

**public static void main(String a[]){**

**String str = "This is %s format example";**

**System.out.println(String.format(str, "string"));**

**String str1 = "We are displaying no %d";**

**System.out.println(String.format(str1, 10));**

**/\*\***

**\* String format by specifying Locale details**

**\*/**

**System.out.println("String format with Locale info:");**

**System.out.println(String.format(Locale.US, str1, 10));**

**}**

**}**

This is string format example

We are displaying no 10

String format with Locale info:

We are displaying no 10

# How to match a format in string using regular expression?

**package com.myjava.string;**

**public class MyStrMatches {**

**public static void main(String a[]){**

**String[] str = {"www.java2novice.com", "**[**http://java2novice.com**](http://java2novice.com/)**"};**

**for(int i=0;i < str.length;i++){**

**if(str[i].matches("^www\\.(.+)")){**

**System.out.println(str[i]+" Starts with 'www'");**

**} else {**

**System.out.println(str[i]+" is not starts with 'www'");**

**}}}}**

www.java2novice.com Starts with 'www'

http://java2novice.com is not starts with 'www'

# How to remove multiple spaces in a string in Java?

# Below example shows how to remove multiple spaces from the given string.

**package com.myjava.string;**

**import java.util.StringTokenizer;**

**public class MyStrRemoveMultSpaces {**

**public static void main(String a[]){**

**String str = "String    With Multiple      Spaces";**

**StringTokenizer st = new StringTokenizer(str, " ");**

**StringBuffer sb = new StringBuffer();**

**while(st.hasMoreElements()){**

**sb.append(st.nextElement()).append(" ");**

**}**

**System.out.println(sb.toString().trim());**

**}**

**}**

String With Multiple Spaces

# Program: How to remove non-ascii characters from a string?

Some times we need to handle text data, wherein we have to handle only ascii characters. Below example shows how to remove non-ascii characters from the given string by using regular expression.

**package com.java2novice.string;**

**public class MyNonAsciiString {**

**public static void main(String a[]){**

**String str = "Bj��rk����oacute�";**

**System.out.println(str);**

**str = str.replaceAll("[^\\p{ASCII}]", "");**

**System.out.println("After removing non ASCII chars:");**

**System.out.println(str);**

**}}**

Bj��rk����oacute�

After removing non ASCII chars:

Bjrkoacute

# Program: How to remove html tags from a string?

# In case if a string contains html tags, then below example helps to trim the html tags from the string. The example uses regular expression to trim the html tags from the string.

**package com.java2novice.string;**

**public class MyHtmlTagRemover {**

**public static void main(String a[]){**

**String text = "<B>I don't want this to be bold<\\B>";**

**System.out.println(text);**

**text = text.replaceAll("\\<.\*?\\>", "");**

**System.out.println(text);**

**}}**

<B>I don't want this to be bold<\B>

I don't want this to be bold

# Program: How to get line count from a string?

# This example shows how to get line count from a string. Assuming that we have read the file and keeping the content in string. We are using String.split() method with the use of regular expression [\n|\r]. It will split the string based on the new line char and carriage return char. After the split, we will get string array, and returning length of the array.

**package com.java2novice.string;**

**public class MyStringLineCounter {**

**public static int getLineCount(String text){**

**return text.split("[\n|\r]").length;**

**}**

**public static void main(String a[]){**

**String str = "line1\nline2\nline3\rline4";**

**System.out.println(str);**

**int count = getLineCount(str);**

**System.out.println("line count: "+count);**

**}}**

line1

line2

line3

line4

line count: 4

**= == = =xxxxxx= == == ==xxxx**