String handling :

String is a class.

String means having a sequence of character.

Eg : String str=”hello”;

Here hello is a string , but java considered as object

String is a immutable , because cannot modify the string

StringBuffer and StringBuilder both are mutable, because we can modify the string

String, StringBuffer, StringBuilder all these are there in java.lang package and all these are final class.

and implements the charSequence interface

We can create string object in two ways :

1. By using string literal

String str1=”world”;

1. By using new operator

String str2=new String(“world”);

Example 1 :

**public** **class** StringDemo {

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

// **TODO** Auto-generated method stub

String str=**new** String("hello");

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

/\* char cc[]= {'a','b','c'};

String s1=new String(cc);

System.out.println(s1); \*/

/\* char cc1[]= {'a','b','c','d','e','f'};

String s1=new String(cc1,1,3);

System.out.println(s1); \*/

String s4="hello world";

System.***out***.println(s4.length());

}

}

Example 2 :

**public** **class** StringDemo1 {

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

// **TODO** Auto-generated method stub

String age="10";

String s="he is "+age +" years old";

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

**int** age1=12;

String s1="he is "+age1 +" years old";

System.***out***.println(s1);

String s2="four: "+2+2;

System.***out***.println(s2);

}

}

**charAt() –**

To extract a single character from a String.

**getChars() –**

to extract more than one character

void getChars(int sourceStart,int sourceEnd, char target[],int targetStart)

**toCharArray()** :

is used to convert the String object into the character array.

**public class StringDemo2 {**

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

**// TODO Auto-generated method stub**

**/\* char ch="hello".charAt(1);**

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

**String s1="world";**

**System.out.println(s1.charAt(2)); \*/**

**/\* String s2="pumo technovation institute";**

**int start=5;**

**int end=9;**

**char buf[]=new char[end-start];**

**s2.getChars(start, end, buf, 0);**

**System.out.println(buf); \*/**

**/\* String s3="summer";**

**char ts[]=s3.toCharArray();**

**for(char c:ts) {**

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

**} \*/**

**}**

**}**

**equals() and equalsIgnoreCase()**

**startsWith()**

**endWith()**

**public class StringDemo3 {**

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

**/\* String s1="hello";**

**String s2="HELLO";**

**String s3="hello";**

**System.out.println(s1.equals(s3));**

**System.out.println(s1.equals(s2));**

**System.out.println(s1.equalsIgnoreCase(s2)); \*/**

**/\* System.out.println("Foobar".startsWith("Foo"));**

**System.out.println("Foobar".startsWith("bar",3)); \*/**

**System.*out*.println("Foobar".endsWith("bar"));**

**}**

**}**

**equals() vs ==**

**equals() -> check for content comparison**

**== -> check for reference comparison**

**indexOf and lastIndexOf()**

**indexOf() –**

**lastIndexOf() -**

**Example :**

public class StringDemo5 {

public static void main(String[] args) {

// TODO Auto-generated method stub

String s1="this is the demo of the demo earth";

System.*out*.println("the character position is : "+s1.indexOf('i'));

System.*out*.println("the last character position is : "+s1.lastIndexOf('i'));

System.*out*.println("string first occurence position : "+s1.indexOf("the"));

System.*out*.println("string last occurence position : "+s1.lastIndexOf("the"));

}

}

**substring()**

To extract particular part of the string

**concat()**

to join two string

**replace()**

to replace a character

**trim()**

it removes the front space and back space

**toLowerCase()**

**toUpperCase()**

**Example :**

**public class StringDemo6 {**

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

**// TODO Auto-generated method stub**

**String str1="pumo technology software institue";**

**System.*out*.println(str1);**

**System.*out*.println(str1.substring(16));**

**System.*out*.println(str1.substring(5, 15));**

**String a1=" hello earth ";**

**String b1="world";**

**System.*out*.println(a1.concat(b1));**

**System.*out*.println(a1+b1);**

**System.*out*.println(b1.replace('w', 'h'));**

**System.*out*.println(a1.trim());**

**System.*out*.println(b1.toUpperCase());**

**System.*out*.println(b1.toLowerCase());**

**}**

**}**

**StringBuffer**

It is a mutable , it means we can modify the String

It represents growable and writeable in nature

Initial capacity for StringBuffer constructor is 16

Program 1 :

**public class StringBufferDemo1 {**

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

**// TODO Auto-generated method stub**

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

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

**System.*out*.println(sb.length());**

**System.*out*.println(sb.capacity());**

**System.*out*.println("character value is .. "+sb.charAt(1));**

**sb.setCharAt(1, 'i');**

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

**sb.setLength(2);**

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

**sb.append("world").append(" welcome");**

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

**}**

**}**

**Program 2 :**

**public class StringBufferDemo2 {**

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

**// TODO Auto-generated method stub**

**//insert()**

**StringBuffer sb=new StringBuffer("I Java!");**

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

**sb.insert(2, "like ");**

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

**sb.reverse();**

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

**sb.reverse();**

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

**sb.delete(2, 6);**

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

**sb.deleteCharAt(3);**

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

**sb.replace(3, 6, "world");**

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

**}**

**}**

**StringBuilder**

StringBuilder is mutable

StringBuilder same as StringBuffer

The difference is

StringBuffer is Synchronized and thread safety

StringBuilder is not Synchrnized and not thread safety.

StringBuilder is fast performance compare with StringBuffer.