OOPs Lab Assignment 4

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Perform to use string methods to perform string modifications.

Code-

```
public class StringModification{
public static void main(String args[]){
String s1 = "Dhathri";
String s2 = "Random";

/*CharAt*/
System.out.println("CharAt: " + s1.charAt(0));

/*compareTo*/
System.out.println("compareTo: " + s1.compareTo(s2));

/*compareToIgnoreCase*/
System.out.println("compareToIgnoreCase: " + s1.compareToIgnoreCase(s2));

/*concat*/
System.out.println("concat: " + s1.concat(s2));

/*endswith*/
System.out.println("endswith: " + s1.endsWith("i"));

/*equals*/
System.out.println("equals: " + s1.equals(s2));

/*equalsIgnoreCase*/
System.out.println("equalsIgnoreCase: " + s1.equalsIgnoreCase(s2));

/*getBytes*/
System.out.print("getBytes: ");
byte[] byteArray;
byteArray = s1.getBytes();
for (int i = 0; i < byteArray.length; i++){
System.out.print(byteArray[i]);
}

System.out.print("\n");

/*getChars*/
char[] ch1 = new char[10];
System.out.println("getChars: ");
s1.getChars(2, 4, ch1, 3);
System.out.println(ch1);

/*indexOf*/
System.out.println("indexOf: " + s1.indexOf('t'));
```

```
/*isempty*/
System.out.println("isempty: " + s1.isEmpty());

/*lastIndexOf*/
System.out.println("lastIndexOf: " + s1.lastIndexOf('i'));

/*RegionMatches*/
String str1 = "Specific student of CSE and CM";
String str2 = "Compares a specific region inside a string";
boolean match1 = str1.regionMatches(0, str2, 28, 8);
boolean match2 = str2.regionMatches(9, str2, 9, 8);
System.out.println("Str1[0 - 7] == Str2[28 - 35]: " + match1);
System.out.println("Str1[9 - 15] == Str2[9 - 15]: " + match2);

/*replace*/
System.out.println("Replace: " + s1.replace('a','z'));

/*startsWith*/
System.out.println("startsWith: " + s1.startsWith("Dha"));

/*subsequence*/
System.out.println("subsequence: " + s1.subSequence(2, 5));

/*subString*/
System.out.println("substring: " + s1.substring(2, 5));

/*Tochar*/
System.out.println("ToChar: ");
char[] ch = s1.toCharArray();
for(int i = 0; i < ch.length; i++){
System.out.print(ch[i]);
}

System.out.print("\n");

/*toLowerCase*/
System.out.println("LowerCase: " + s1.toLowerCase());

/*toString*/
System.out.println("String: " + s1.toString());

/*toUpperCase*/
System.out.println("UpperCase: " + s1.toUpperCase());

/*trim*/
System.out.println("Trim: " + s1.trim());

/*ValueOf*/
Double c = Double.valueOf(5);
System.out.println("Value of: " + c);
}
```

}

Output -

```
dhathri@dhathri-Inspiron-3493:~/Documents/OOPs_Lab/Lab_4$ javac StringModification.java
dhathri@dhathri-Inspiron-3493:~/Documents/OOPs_Lab/Lab_4$ java StringModification
CharAt: D
compareTo: -14
compareToIgnoreCase: -14
concat: DhathriRandom
endswith: true
equals: false
equalsIgnoreCase: false
getBytes: 6810497116104114105
getChars:
at
indexOf: 3
isempty: false
lastIndexOf: 6
Str1[0 - 7] == Str2[28 - 35]: false
Str1[9 - 15] == Str2[9 - 15]: true
Replace: Dhzthri
startsWith: true
subsequence: ath
substring: ath
ToChar:
Dhathri
LowerCase: dhathri
String: Dhathri
UpperCase: DHATHRI
Trim: Dhathri
Value of: 5.0
dhathri@dhathri-Inspiron-3493:~/Documents/OOPs_Lab/Lab_4$
```

Program to use string buffer methods to perform string modifications.

Code-

```
import java.lang.*;
class StringBufferDemo{
public static void main(String args[]){
StringBuffer sb1 = new StringBuffer("Dhathri");
StringBuffer sb2 = new StringBuffer("Random");

/*CharAt*/
System.out.println("CharAt: " + sb1.charAt(0));

/*SetChar*/
sb1.setCharAt(1, 'i');
System.out.println("SetCharAt: " + sb1);

/*getChars*/
char[] ch1 = new char[10];
System.out.println("getChars: ");
sb1.getChars(2, 4, ch1, 3);
System.out.println(ch1);

/*append*/
```

```
System.out.println("Append: " + sb1.append('o'));

/*insert*/
System.out.println("Insert: " + sb1.insert(4, 'c'));

/*Replace*/
System.out.println("Replace: " + sb1.replace(3, 5, "is"));

/*Substring*/
System.out.println("Substring: " + sb1.substring(2, 5));

/*Reverse*/
System.out.println("Reverse: " + sb1.reverse());

/*Capacity*/
System.out.println("Capacity: " + sb1.capacity());

/*Ensure*/
sb1.ensureCapacity(50);
System.out.println("Ensure Capacity: " + sb1.capacity());

/*Length*/
System.out.println("Length: " + sb1.length());

/*Delete*/
System.out.println("Delete: " + sb1.delete(2, 5));
}
}
```

Output-

```
dhathri@dhathri-Inspiron-3493:~/Documents/OOPs_Lab/Lab_4$ javac StringBufferDemo.java
dhathri@dhathri-Inspiron-3493:~/Documents/OOPs_Lab/Lab_4$ java StringBufferDemo
CharAt: D
SetCharAt: Diathri
getChars:
at
Append: Diathrio
Insert: Diatchrio
Replace: Diaishrio
Substring: ais
Reverse: oirhsiaiD
Capacity: 23
Ensure Capacity: 50
Length: 9
Delete: oiiaiD
dhathri@dhathri-Inspiron-3493:~/Documents/OOPs_Lab/Lab_4$
```