

CORE JAVA

STRING ASSIGNMENT

Assignment on String Class

1. Write an application to determine the length of the String str="Hello World". (Hint: Use String method).

Code: -

```
*Length.java ×
1 package string;
2 public class Length
3 {
4     public static void main(String[] args)
5     {
6         String str="Hello World";
7         int l=str.length();
8         System.out.print("Length of the given string is:"+l);
9     }
10 }
```

Problems @ Javadoc Declaration Console × Git Staging
<terminated> Length [Java Application] C:\Users\MBALKRIS\.p2\pool\plugins\or
Length of the given string is:11

2. Write an application to join two strings "Hello"& "How are you?" (Hint: Use String method).

Code: -

```
Length.java Concat.java ×
1 package string;
2 public class Concat
3 {
4     public static void main(String[] args)
5     {
6         String s1="Hello ";
7         String s2="How are you?";
8         String out=s1.concat(s2);
9         System.out.print("Strings after concatenation:"+out);
10    }
```

Problems @ Javadoc Declaration Console × Git Staging
<terminated> Concat [Java Application] C:\Users\MBALKRIS\.p2\pool\plugins\c
Strings after concatenation:Hello How are you?

3. Given a string "Java String pool refers to collection of strings which are stored in heap memory", perform the following operations (Hint: all operations can be performed using string method).
 - a. Print the string to console in lowercase.
 - b. Print the string to console in uppercase.
 - c. Replace all 'a' character in the string with '\$' sign

- d. Check if the original string contains the word “collection”
- e. Check if the following string “java String pool refers to collection of strings which are stored in heap memory” matches the original
- f. If the string does not match check if there is another method which can be used to check if the strings are equal.

Code: -

```

1 package string;
2 public class Stroperation
3 {
4     public static void main(String[] args)
5     {
6         String str="Java String pool refers to collection of strings which are stored in heap memo
7         String upper=str.toUpperCase();
8         System.out.println("Uppercase String:"+upper);
9         String lower=str.toLowerCase();
10        System.out.println("Lowercase String:"+lower);
11        String re=str.replace("a", "$");
12        System.out.println("String after replacement:"+re);
13        System.out.println("Contains word 'collection':"+str.contains("collection"));
14        String str1="Java string pool refers to collection of strings which are stored in heap mem
15        boolean value=str1.equals(str);
16        System.out.println("Both the string matches:"+value);
17        boolean newvalue=str1.equalsIgnoreCase(str);
18        System.out.println("New Match:"+newvalue);
19    }
20 }

```

Problems Javadoc Declaration Console Git Staging

<terminated> Stroperation [Java Application] C:\Users\MBALKRIS\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.0.v20220914-1920\jre\bin\java.exe -Xms128m -Xmx1024m -Djava.awt.headless=true -Dfile.encoding=UTF-8 -Djava.io.tmpdir=C:\Users\MBALKRIS\AppData\Local\Temp\ -Djava.library.path=C:\Users\MBALKRIS\AppData\Local\Temp\ -Djava.class.path=C:\Users\MBALKRIS\AppData\Local\Temp\ Stroperation.class

Uppercase String:JAVA STRING POOL REFERS TO COLLECTION OF STRINGS WHICH ARE STORED IN HEAP MEMORY
Lowercase String:java string pool refers to collection of strings which are stored in heap memory
String after replacement:J\$v\$ String pool refers to collection of strings which \$re stored in he\$ memory
Contains word 'collection':true
Both the string matches:false
New Match:true

Assignment on StringBuffer Class

1. Write an append the following strings “String Buffer”, “is a peer class of String”, “that provides much of”, “the functionality of strings” using a StringBuffer.

Code: -

```

1 package string;
2 public class Appending
3 {
4     public static void main(String[] args)
5     {
6         StringBuffer sbf1=new StringBuffer("StringBuffer");
7         System.out.println("String Buffer 1:"+sbf1);
8
9         StringBuffer sbf2=new StringBuffer("is a peer class of String");
10        System.out.println("String Buffer 2:"+sbf2);
11
12        StringBuffer sbf3=new StringBuffer("that provides much of");
13        System.out.println("String Buffer 3:"+sbf3);
14
15        StringBuffer sbf4=new StringBuffer("the functionality of strings");
16        System.out.println("String Buffer 2:"+sbf4);
17
18        sbf1.append(sbf2);
19        sbf1.append(sbf3);
20        sbf1.append(sbf4);
21        System.out.println(" ");
22        System.out.println("After appending:"+sbf1);
23    }
24 }

```

Problems Javadoc Declaration Console Git Staging

<terminated> Appending [Java Application] C:\Users\MBALKRIS\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.0.v20220914-1920\jre\bin\java.exe -Xms128m -Xmx1024m -Djava.awt.headless=true -Dfile.encoding=UTF-8 -Djava.io.tmpdir=C:\Users\MBALKRIS\AppData\Local\Temp\ -Djava.library.path=C:\Users\MBALKRIS\AppData\Local\Temp\ -Djava.class.path=C:\Users\MBALKRIS\AppData\Local\Temp\ Appending.class

String Buffer 1:StringBuffer
String Buffer 2:is a peer class of String
String Buffer 3:that provides much of
String Buffer 2:the functionality of strings
After appending:StringBufferis a peer class of Stringthat provides much ofthe functionality of strings

2. Insert the following string “insert text” in to the string “It is used to _ at the specified index position” at the location denoted by the sign _

Code: -

```
Indexing.java ×
1 package string;
2 public class Indexing
3 {
4     public static void main(String[] args)
5     {
6         String str="It is used to _ at the specified index position";
7         String newstr="insert text";
8         int index=str.indexOf("_");
9         System.out.println("Index no:"+index);
10        System.out.println("Initial String:"+str);
11        System.out.println("Index where new string is to be added:"+index);
12        StringBuffer string=new StringBuffer(str);
13        string.deleteCharAt(index);
14        string.insert(index, newstr);
15        System.out.println("Result:"+string);
16    }
17 }
```

Problems @ Javadoc Declaration Console × Git Staging

<terminated> Indexing [Java Application] C:\Users\MBALKRIS\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64.jre\bin\java.exe -classpath C:\Users\MBALKRIS\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64.jre\lib\jrt.jar;C:\Users\MBALKRIS\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64.jre\lib\jrt.jar Index no:14
Initial String:It is used to _ at the specified index position
Index where new string is to be added:14
Result:It is used to insert text at the specified index position

3. Reverse the following string “This method returns the reversed object on which it was called” using StringBuffer class.

Code: -

```
*Reversing.java ×
1 package string;
2 public class Reversing
3 {
4     public static void main(String[] args)
5     {
6         StringBuffer sbf=new StringBuffer("This method returns the reversed object on which it was called");
7         System.out.println("Original String:"+sbf);
8         sbf.reverse();
9         System.out.println("Reversed String:"+sbf);
10    }
11 }
```

Problems @ Javadoc Declaration Console × Git Staging

<terminated> Reversing [Java Application] C:\Users\MBALKRIS\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64.jre\bin\java.exe -classpath C:\Users\MBALKRIS\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64.jre\lib\jrt.jar;C:\Users\MBALKRIS\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64.jre\lib\jrt.jar Original String:This method returns the reversed object on which it was called
Reversed String:dellac saw ti hcihw no tcejbo desrever eht snruter dohtem siht

Assignment on StringBuilder Class

- Provide solution for “Assignments on StringBuffer class” using StringBuilder class.

Code: -

```
Appendingsb.java ×
1 package string;
2 public class Appendingsb
3 {
4     public static void main(String[] args)
5     {
6         StringBuilder sb=new StringBuilder("String Buffer");
7         String s1="is a peer class of string";
8         String s2="that provides much of";
9         String s3="the functionality of strings";
10        sb.append(s1);
11        sb.append(s2);
12        sb.append(s3);
13        System.out.println("After appending using StringBuilder:"+sb);
14    }
15 }
```

Outline ×

- string
 - Appendingsb
 - main(String[]) : void

Problems Javadoc Declaration Console × Git Staging

<terminated> Appendingsb [Java Application] C:\Users\MBALKRIS\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.0.v20211012-1059\jre\bin\jav
After appending using StringBuilder:String Bufferis a peer class of stringthat provides much ofthe functionality of strings

```
Indexingsb.java ×
1 package string;
2 public class Indexingsb
3 {
4     public static void main(String[] args)
5     {
6         String str="It is used to _ at the specified index position";
7         String newstr="insert text";
8         int index=str.indexOf("_");
9         System.out.println("Index no:"+index);
10        System.out.println("Initial String:"+str);
11        System.out.println("Index where new string is to be added:"+index);
12        StringBuilder string=new StringBuilder(str);
13        string.deleteCharAt(index);
14        string.insert(index, newstr);
15        System.out.println("Result:"+string);
16    }
17 }
```

Problems Javadoc Declaration Console × Git Staging

<terminated> Indexingsb [Java Application] C:\Users\MBALKRIS\p2\pool\plugins\org.eclipse.justj.op
Index no:14
Initial String:It is used to _ at the specified index position
Index where new string is to be added:14
Result:It is used to insert text at the specified index position

```
Reversingsb.java ×
1 package string;
2 public class Reversingsb
3 {
4     public static void main(String[] args)
5     {
6         StringBuilder sbf=new StringBuilder("This method returns the reversed object on which it w
7         System.out.println("Original String:"+sbf);
8         sbf.reverse();
9         System.out.println("Reversed String:"+sbf);
10    }
11 }
```

Problems Javadoc Declaration Console × Git Staging

<terminated> Reversingsb [Java Application] C:\Users\MBALKRIS\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_
Original String:This method returns the reversed object on which it was called
Reversed String:dellac saw ti hcihw no tcejbo desrever eht snruter dohtem sihT