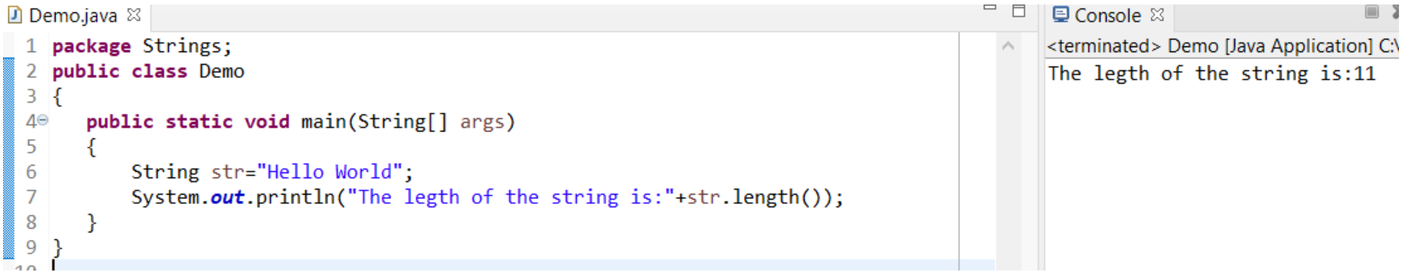
Assignments on String Class

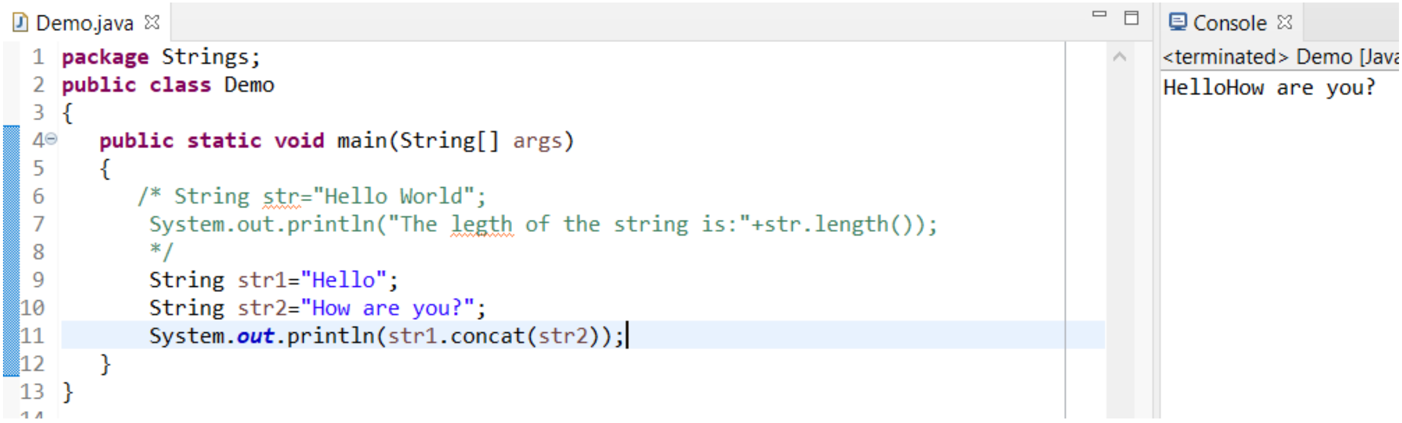
1) Write an application to determine the length of the String str "Hello World". (Hint: Use String method)



```
package Strings;
public class Demo
{
    public static void main(String[] args)
    {
        String str="Hello World";
        System.out.println("The legth of the string is:"+str.length());
    }
}
```

```
<terminated> Demo [Java Application] C:\
The legth of the string is:11
```

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

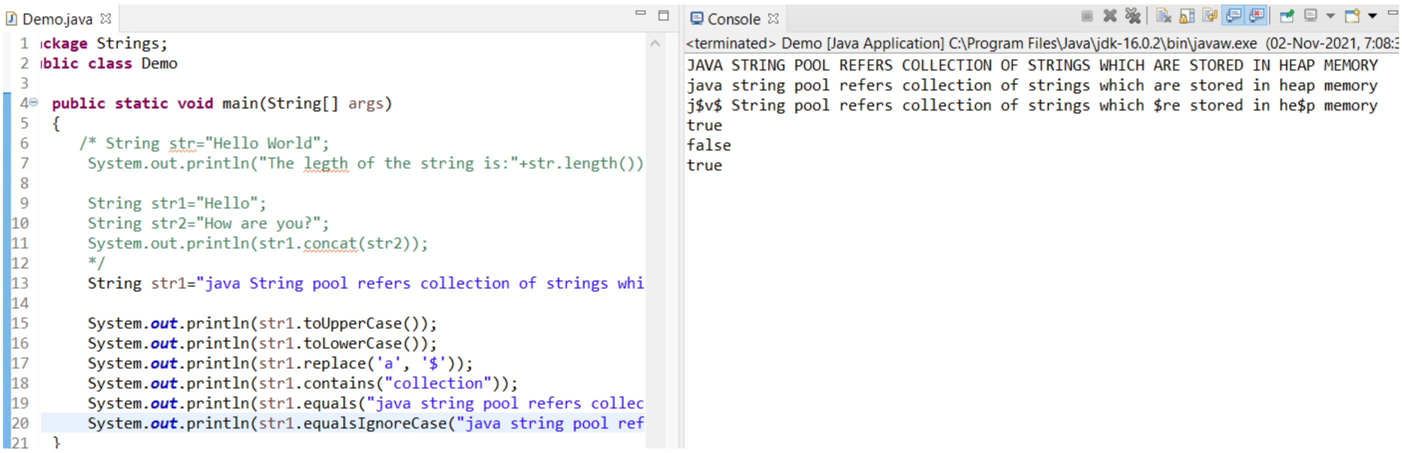


```
package Strings;
public class Demo
{
    public static void main(String[] args)
    {
       /* String str="Hello World";
        System.out.println("The legth of the string is:"+str.length());
        */
        String str1="Hello";
        String str2="How are you?";
        System.out.println(str1.concat(str2));
    }
}
```

```
<terminated> Demo [Java
HelloHow 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 operation can be performed using String methods)

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 S 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



```
ıckage Strings;
ıblic class Demo

 public static void main(String[] args)
 {
    /* String str="Hello World";
     System.out.println("The legth of the string is:"+str.length())

     String str1="Hello";
     String str2="How are you?";
     System.out.println(str1.concat(str2));
     */
     String str1="java String pool refers collection of strings whi

     System.out.println(str1.toUpperCase());
     System.out.println(str1.toLowerCase());
     System.out.println(str1.replace('a', '$'));
     System.out.println(str1.contains("collection"));
     System.out.println(str1.equals("java string pool refers collec
     System.out.println(str1.equalsIgnoreCase("java string pool ref
 }
```

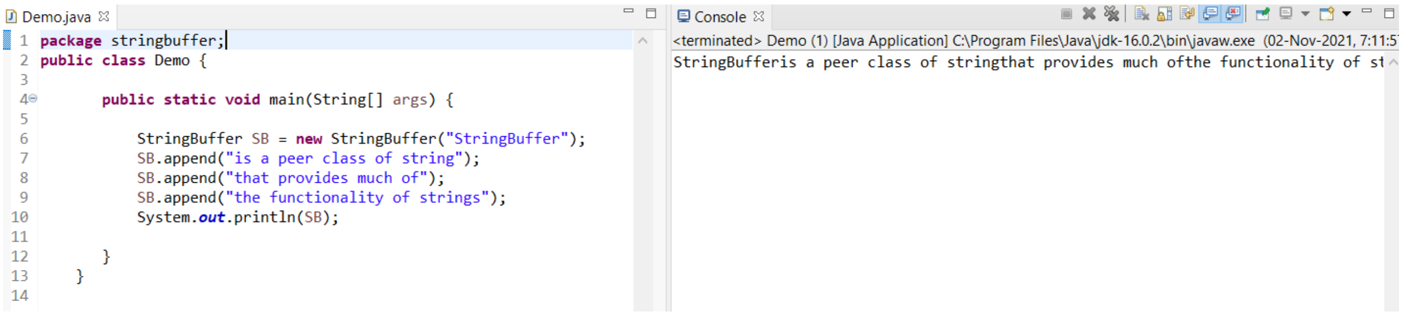
```
<terminated> Demo [Java Application] C:\Program Files\Java\jdk-16.0.2\bin\javaw.exe  (02-Nov-2021, 7:08:3
JAVA STRING POOL REFERS COLLECTION OF STRINGS WHICH ARE STORED IN HEAP MEMORY
java string pool refers collection of strings which are stored in heap memory
j$v$ String pool refers collection of strings which $re stored in he$p memory
true
false
true
```

Assignments on StringBuffer Class

Note: StringBuffer is a peer class of String that provides much of the functionality of strings. String represents fixed-length, immutable character sequences while StringBuffer represents growable and writable character sequences. StringBuffer may have characters and substrings inserted in the middle or appended to the end. It will automatically grow to make room for such additions and often has more characters preallocated than are actually needed, to allow room for growth.

1) Write an application to append the following strings "StringBuffer", "is a peer class of

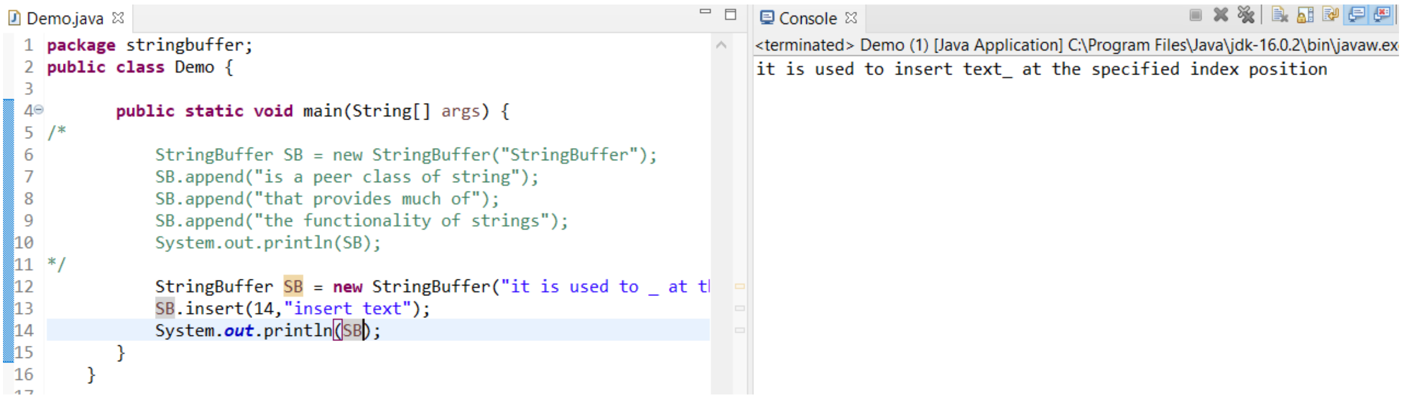
String", "that provides much of the functionality of strings using a StringBuffer at the specified index



```java
package stringbuffer;
public class Demo {

    public static void main(String[] args) {

        StringBuffer SB = new StringBuffer("StringBuffer");
        SB.append("is a peer class of string");
        SB.append("that provides much of");
        SB.append("the functionality of strings");
        System.out.println(SB);

    }
  }

```

```
<terminated> Demo (1) [Java Application] C:\Program Files\Java\jdk-16.0.2\bin\javaw.exe  (02-Nov-2021, 7:11:5
StringBufferis a peer class of stringthat provides much ofthe functionality of st
```

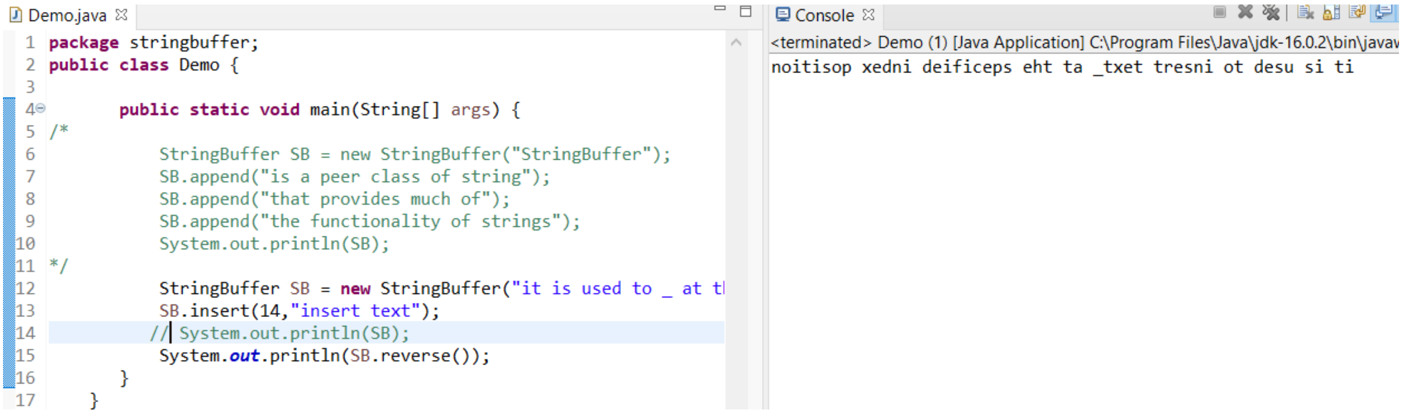
2) Insert the following string "insert text into the string "It is used to position at the location denoted by the sign



```java
package stringbuffer;
public class Demo {

    public static void main(String[] args) {
/*
        StringBuffer SB = new StringBuffer("StringBuffer");
        SB.append("is a peer class of string");
        SB.append("that provides much of");
        SB.append("the functionality of strings");
        System.out.println(SB);
*/
        StringBuffer SB = new StringBuffer("it is used to _ at tl
        SB.insert(14,"insert text");
        System.out.println(SB);
    }
  }
```

```
<terminated> Demo (1) [Java Application] C:\Program Files\Java\jdk-16.0.2\bin\javaw.ex
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

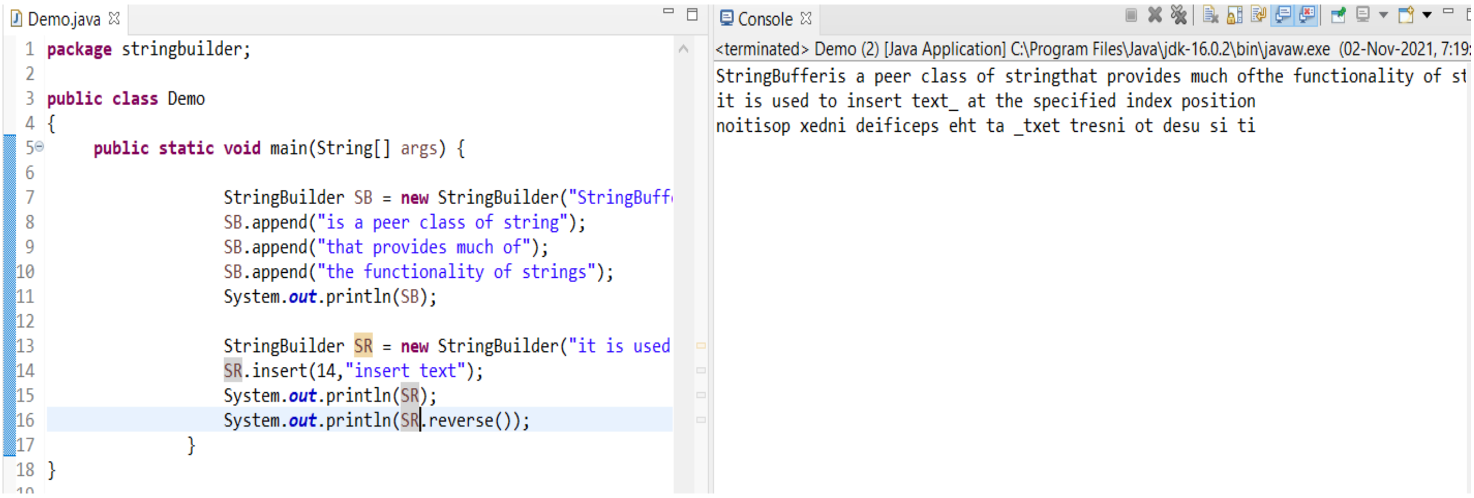


```java
package stringbuffer;
public class Demo {

    public static void main(String[] args) {
/*
        StringBuffer SB = new StringBuffer("StringBuffer");
        SB.append("is a peer class of string");
        SB.append("that provides much of");
        SB.append("the functionality of strings");
        System.out.println(SB);
*/
        StringBuffer SB = new StringBuffer("it is used to _ at tl
        SB.insert(14,"insert text");
       // System.out.println(SB);
        System.out.println(SB.reverse());
    }
  }
```

```
<terminated> Demo (1) [Java Application] C:\Program Files\Java\jdk-16.0.2\bin\javav
noitisop xedni deificeps eht ta _txet tresni ot desu si ti
```

Note: StringBuilder: J2SE 5 adds a new string class to Java's already powerful string handling capabilities. This new class is called StringBuilder. It is identical to StringBuffer except for one important difference: It is not synchronized, which means that it is not thread safe. The advantage of String Builder is faster performance. However, in cases in which you are using multithreading, you must use StringBuffer rather than String Builder.

1) Provide solution for "Assignments on StringBuffer Class" using StringBuilder class



```java
package stringbuilder;

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

				StringBuilder SB = new StringBuilder("StringBuff
				SB.append("is a peer class of string");
				SB.append("that provides much of");
				SB.append("the functionality of strings");
				System.out.println(SB);

				StringBuilder SR = new StringBuilder("it is used
				SR.insert(14,"insert text");
				System.out.println(SR);
				System.out.println(SR.reverse());
			}
}
```

```
<terminated> Demo (2) [Java Application] C:\Program Files\Java\jdk-16.0.2\bin\javaw.exe  (02-Nov-2021, 7:19
StringBufferis a peer class of stringthat provides much ofthe functionality of st
it is used to insert text_ at the specified index position
noitisop xedni deificeps eht ta _txet tresni ot desu si ti
```