**Assisted Practice: 2.6 Strings**

This section will guide you to:

* Create a Java project in your IDE
* Write a Java program to create strings and convert them into StringBuffer and StringBuilder

This lab has three subsections, namely:

* + 1. Writing a program in Java to verify implementations of strings, StringBuffer, and StringBuilder
    2. Executing the program and verifying working of strings
    3. Pushing the code to your GitHub repositories

**Step 2.6.1:** Writing a program in Java to verify implementations strings, StringBuffer, and StringBuilder

There are two ways you can perform this step; you can create a new Java project, or you can create a new Java class in the existing project. It is preferable to create a new Java class in the existing project but feel free to explore the first option. The steps mentioned below will work once you create a project in Java.

* Open Eclipse
* *[Right click]* on the **src** folder of the project
* Select *New* -> *Java Class* -> Enter the filename (follow camelCasing)
* Execute the code below resolving the warning and errors due to compatibility-related issues

**public** **class** stringDemo {

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

//methods of strings

System.***out***.println("Methods of Strings");

String sl=**new** String("Hello World");

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

//substring

String sub=**new** String("Welcome");

System.***out***.println(sub.substring(2));

//String Comparison

String s1="Hello";

String s2="Heldo";

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

//IsEmpty

String s4="";

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

//toLowerCase

String s5="Hello";

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

//replace

String s6="Heldo";

String replace=s2.replace('d', 'l');

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

//equals

String x="Welcome to Java";

String y="WeLcOmE tO JaVa";

System.***out***.println(x.equals(y));

System.***out***.println("\n");

System.***out***.println("Creating StringBuffer");

//Creating StringBuffer and append method

StringBuffer s=**new** StringBuffer("Welcome to Java!");

s.append("Enjoy your learning");

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

//insert method

s.insert(0, 'w');

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

//replace method

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

sb.replace(0, 2, "hEl");

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

//delete method

sb.delete(0, 1);

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

//StringBuilder

System.***out***.println("\n");

System.***out***.println("Creating StringBuilder");

StringBuilder sb1=**new** StringBuilder("Happy");

sb1.append("Learning");

System.***out***.println(sb1);

System.***out***.println(sb1.delete(0, 1));

System.***out***.println(sb1.insert(1, "Welcome"));

System.***out***.println(sb1.reverse());

//conversion

System.***out***.println("\n");

System.***out***.println("Conversion of Strings to StringBuffer and StringBuilder");

String str = "Hello";

// conversion from String object to StringBuffer

StringBuffer sbr = **new** StringBuffer(str);

sbr.reverse();

System.***out***.println("String to StringBuffer");

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

// conversion from String object to StringBuilder

StringBuilder sbl = **new** StringBuilder(str);

sbl.append("world");

System.***out***.println("String to StringBuilder");

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

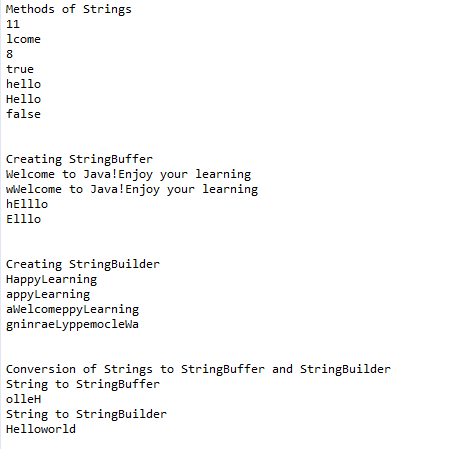
}

}

**Step 2.6.2:** Executing the program and verifying the working of strings

Before you execute the program, check for syntactical corrections. If no errors are found, follow the steps mentioned below:

* ***[Right click]*** in the program space
* Select *Run As Java Application*



**Step 2.6.3:** Pushing the code to your GitHub repositories

* Open your command prompt and navigate to the folder where you have created your files.

**cd <folder path>**

* Initialize your repository using the following command:

**git init**

* Add all the files to your git repository using the following command:

**git add .**

* Commit the changes using the following command:

**git commit . -m “Changes have been committed.”**

* Push the files to the folder you initially created using the following command:

**git push -u origin master**