Lab Assignment 01

2021 – 2022 Spring, CMPE 114 - 211 Fundamentals of Programming II

Question 02

Submission

You need to implement the question and upload your Java source file (StringExercise.java) into the available Moodle submission.

The following program illustrates the use of some of the methods in the String class. Study the program to see what it is doing.

```
// *************************************************************
// StringExercise.java
// Test several methods for manipulating String objects
// *************************************************************
public class StringExercise {

    public static void main(String[] args) {
        String sentence = new String("Hello World Again! ");
        int length; // length of the sentence
        String first; //First part of the sentence
        String second; // Second part of the sentence
        String mixed; // new sentence after the concatenation of first and second
        //compute the length of the sentence
        length = sentence.length();

        //take the first part of the sentence in between 0 and the random number
        first = sentence.substring(0,length/2);

        //take the second part of the sentence in between the random number and length
        second = sentence.substring(length/2,length);
```

```
        //concatenate the String variables first and second
        mixed = second.concat(first);

        //print the result
        System.out.println("The length of the sentence: "+length);
        System.out.println("New Sentence: "+mixed);
    }

}
```

The file *StringExercise.java* contains this program. Save the file to your directory and compile and run it. Study the output and make sure you understand the relationship between the code and what is printed. Now modify the file as follows:

1. Declare a variable of type String named *word* with the String value “No More” after the variable, sentence, is declared.
2. Declare a variable of type String named *changedSentence* right under other String declarations.
3. Add an assignment to the variable, *changedSentence*, by replacing the word, “Again” with the previously declared variable, *word*. Then, print it out at the bottom line.
4. Declare a Boolean type of variable with the name *result.* Check whether *changedStence* has the variable of *word* by using contains method and assign it to *result*. Print it out after printing *changedSentence*.
5. Declare two variables, *fruit1* and *fruit2* of type String. Add statements to the program to prompt the user to enter their two favorite fruits’ names separately. Read in the results using the appropriate Scanner class method. Then using String class methods create and print a new string that is the concatenation of *fruit1* and *fruit2* by excluding each variable’s first letter. All other letters should be uppercase. So, if the user enters apple for the *fruit1* and banana for the *fruit2*, the program should create and print the String PPLEANANA. Do not forget to ask the user to enter their fruits by a message before each entering.