



Department of Statistics & Computer Science  
University of Kelaniya  
Academic Year – 2020/2021  
BECS 12243 - Object Oriented Programming  
Tutorial 03

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1. Write a program to find the length of the string **"Welcome to Java Programming."** Using String operations.
2. Show two ways to concatenate the following two strings together to get the string **"Hi, mom."**:  
String hi = **"Hi, "**;  
String mom = **"mom."**;
3. Write a program that computes your initials from your full name and displays them.
4. Write a java program to print the reverse of a user input string.

For an example, below is the sample input and output in the console.

Enter a string: **Sample Text**

Reversed string: **txeT elpmaS**

5. Write a java program to order two given Strings lexicographically.  
Sample input and output is given below:  
First String: **Banana**  
Second String: **Apple**  
Ordered Strings: **Apple, Banana**
6. What is the output of the following Java code segment (Write the output before executing the given code)?

```
String original ="software";  
StringBuilder result = new StringBuilder("hi");  
int index =original.indexOf('a');  
result.setCharAt(0, original.charAt(0));  
result.insert(1, original.charAt(4));  
result.append(original.substring(1, 4));  
result.insert(3, (original.substring(index, index+2) + ""));  
System.out.println(result);
```

7. A password for a student will be generated as follows. It takes the first letter from the first name, first two letters from the middle name and the two letters before the last letter from the last name. The obtained letters will be concatenated along with age which is multiplied by 100. Finally displays the following:

**Note:**

The password must be in lower case. First letter in the first name, middle name and the last name must be given in upper case.

Ex: First Name: Kamala  
Middle Name: Sugarcane  
Last Name: Perera  
Age: 20  
Password: ksuer2000

Your program should work for any input NOT ONLY this given example in the exercise.

8. Write small java programs for the following.

- i. Implement a Java program that remove the first three occurrences of the character 'm' (capital or small) from "I'm a JaVa PrOgRaMmEr", string then print the resulting string to the screen.

Output: I' a JaVa PrOgRaEr

- ii. Implement a Java program that will split and print the three components of the following.

course description: **ICS 102: Introduction to Computing I** as shown below:

Course Name: ICS

Course Number: 102

Course Description: Introduction to Computing I

- iii. We have two student names **Niroshan Perera** and **Kamal Alwis**. Implement a Java program that will exchange the last name of the two students in such a way that the new names are going to be **Niroshan Alwis** and **Kamal Perera**.

Your program should work for any given two names NOT ONLY this given example in the exercise.

9. Print the following Array using for loop and foreach loop and get the sum of all the values stored in the Num array.

Num = {40,28,10,81,23,45,47,18,76,64}

10. Below two-dimensional array consists of weights of students in 4 student groups. Compute the average weight of students for each group and display them.

```
double [] [] weights = {{54.5, 50, 48}, {43, 56.5, 67, 65.5,59}, {45, 55, 63, 45.5, 54.5}, {66, 49.5, 56}};
```

11. Create a two dimensional array to store the students' first names in the row you are sitting and the rows before and after you. Assuming that seats in the above three rows are named by the row number and column number, print each student name along with the relevant seat number as follows:

Sample Output:

<b>Seat No</b>	<b>Student</b>
11	Amali
12	Thilina
13	Vihara
21	Kamal