Heaven's Light is Our Guide Rajshahi University of Engineering & Technology Department of Computer Science & Engineering

Lab Manual

Course Code: **CSE 1204 (Sec A)**Course Title: Sessional based on CSE 1203
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Module 5 [Advanced Topics]: (for Week 10)

Topic 1[java Programming Basics]

Problem Statement: Write java programs to do the following

- i) Display your name and address in two lines
- ii) Take two integers as inputs and prints the bigger one
- iii) Input a series of 10 numbers into an array ax[] and finds the largest, smallest and average of these numbers.

Topic 2[java Programming Access Modifier]

Problem Statement: Verify the following access modifier using the appropriate coding

Access Modifier	within class	within package	outside package by subclass only	outside package
Private	Υ	N	N	N
Default	Υ	Υ	N	N
Protected	Υ	Υ	Υ	N
Public	Υ	Υ	Υ	Υ

Topic 3[java Programming private method]

Problem Statement: Verify that private methods can be used only inside the class but it can not be used from outside the class.

Topic 4[java Programming static method/member]

Problem Statement: Verify that static methods can access static method/member but can not access to non-static method/member.

Topic 5[java Programming string class]

Problem Statement: Verify the following methods of string class

charAt()	<pre>isEmpty()</pre>	toLowerCase()
<pre>compareTo()</pre>	<pre>length()</pre>	toUpperCase()
concat()	replace()	toString()
equals()	<pre>substring()</pre>	trim()

Topic 6[java Programming anonymous object]

Problem Statement: Write a program to do the following using array

- i. write a method InitiaArray() that returns the initial array as anonymous object.
- ii. write a method SortArray() that returns the sorted array as anonymous object.
- iii. write a method PrintArray() that prints the array

Topic 7[java Programming toString() & (...)]

Problem Statement: Write a program to do the following using array

- i. display the array elements using toString() method
- ii. write a method FindBig() that returns the largest of first four numbers of the array using (...) variable length parameter.

Topic 8[java Programming ArrayList class]

Problem Statement: Write a program to create an array **ax** using AarryList class of integers. Then for the array **ax**-

- i. add 4 elements 10, 50, 70 and 30 using add() method
- ii. insert 60 at index 1
- iii. print element at index 2
- iv. delete element of index 3
- v. delete element 10
- vi. sort and prints the elements using for-each loop
- vii. delete all the elements of the array