Programming Software Systems

Lab 5

Introduction to Java

Exercises 1

a) Write a program to swap two numbers in Java.

b) Write a program which finds an ASCII value of a character.

c) Write a Java program to get the index of all the characters of the alphabet.

d) Write a Java program to compare 2 strings lexicographically.
Hint: 2 strings are lexicographically equal if they are the same length and contain the same characters in the same positions

e) Write a Java method to count all vowels in a string.

Exercise 2

a) Write a Java program to convert temperature from Fahrenheit to Celsius degree.
b) Calculate Difference Between two Time periods by creating a class Time.
c) Write a Java program to convert binary, decimal and hexadecimal numbers

Exercise 3

a)   Write a program to calculate the average value of array elements.

b)   Write a program to insert an element (specific position) into an array.

c)   Write a program to find the duplicate values of an array of integer values.

d)   Write a program to move all 0's to the end of an array. Maintain the relative order of the other (non-zero) array elements.

Exercise 4

a) Write a program to check whether a file or directory specified by pathname exists or not.

b) Write a Java program to check if given pathname is a directory or a file.

c) Write a program that reads the data from a text file and writes it into another text file