MSc 12 Semester III

Date: 04/11/23

Duration: 90 mts

Advanced Java and Web Applications (BTBIP-309)

Test -2

Each Question is for 10 marks.

- 1. Write a Java Servlet that does the following:
- a) You will submit 3 different strings from an html form (use get or post).
- b) The submitted strings would be passed onto Servlet
- c) The Servlet will try to check common character in all the three strings.

If a common character exists then it prints that character and its position in all 3 strings. Otherwise it just prints "No Common Character Found" .

- d) It then opens a text file named "str.txt" which contains at least 10 lines of text. It searches for the existence of any of the 3 strings in that file and if found it prints the string along with the number of occurrences.
- 2. Submit a list of 15 numbers (integers) onto a cgi script (python) using an html form. This script should calculate the following and display the results:
 - Range (largest number smallest number)
 - Mean (Average of all numbers)
 - Median (Number at the centre)
 - Mode (Most repeated number(s))
 - Sum of all numbers placed at even positions (pos 2,4,6,8,10,12,14)
 - Sum of all numbers placed at odd positions (pos 1,3,5,7,9,11,13,15)

NOTE: Its required to sort the list of numbers in ascending order first, before working on any of the above.

- 3. Write an SQL script that does the following:
 - Creates 3 different databases namely db1,db2,db3
 - db1 contains two tables namely t1 and t2
 - t1 contains details of large land vehicles with fields- name, vehicle num, size
 - t2 contains details of medium land vehicles with same fields as large vehicles.
 - both t1 and t2 has details of atleast 5 vehicles each.
 - db2 contains two tables namely t3 and t4

- t3 contains details of large planes with fields name, size, capacity
- t4 contains details of small planes with same fields as in t3.
- Both t3 and t4 contain details of at least 5 planes each
- Compare t1 with t3, using name as key and if any common name found, print the details of the vehicle and the plane with that common name.
- -Compare t2 and t4 using size as key and if any common size found, print the details of the vehicle and plane with that common size.