**CP PRACTICAL - 6**

*Instructions:*

Write solutions including outputs for the following questions in a word processor and upload on Google classroom.

SQL

1. Create a table STUDENT with columns Sname, Smarks, Dob. Add five meaningful records. Give SQL queries for the following:

(i) Display contents of the table.

(ii) Give the name and date of birth of students whose date of birth is between 1st January, 1997 and 31st December, 1997.

(iii) Add a column class and put the value TY for all rows.

(iv) Arrange the records in ascending order of marks.

(v) Display the location index of the first occurrence of the character ‘e’ in the column Sname.

**(Paste images of SQL query results.)**

**Java**

1. Write a java program to input a square matrix and check whether the matrix is Upper triangular, lower triangular and diagonal matrix. Display the message accordingly.

2. Write a java program to find and display trace of a matrix of order n.

3. Write a java program to find transpose of a matrix of any order.

4. Write a program to find and display the product of two matrices.

5. Write a program to check and display whether an array contains a particular element or not using **Binary Search** Algorithm.

6. Write a program to input two arrays and concatenate them. Print the message

accordingly. Dont use any predefined method.

7. Write a program to sort and display an array of strings in alphabetical order. You can input these strings from the user.

8. Write a java program to find and display the sum of each row and column of a matrix.

(Paste images of output)