**CP PRACTICAL -4**

*Instructions:*

Write solutions including outputs for the following questions in a word processor and upload on Google classroom by 4 PM today (24th September, 2020).

SQL

1. Create the following Table called ‘students’.

**student\_id last\_name first\_name age gpa**

1 Dufresne Andy 20 8.75

2 Redding Ellis NULL 9

10 Heywood NULL 21 6.25

46 Norton Samuel 18 NULL

49 Hadley Byron 20 8.75

104 Diamond Bogs 19 4

What will be the output if the following queries are executed? (Display output)

(i) SELECT \* FROM students WHERE gpa< 4.5;

(ii) SELECT COUNT(first\_name) FROM students WHERE age = 21;

(iii) UPDATE students SET last\_name='Williams' WHERE student\_id = 49;

SELECT student\_id, last\_name, gpa FROM students WHERE age = 20;

(iv) Select avg(round(gpa, 0)) from students;

(v) Select right(rtrim(last\_name),3) as code from students;

JAVA

1. Write a java program to find and display the sum of squares as well as cubes of first n natural numbers using for loop.
2. Write a program to to find and display the sum of the digits of a number.
3. Write a program to display the first n terms of an arithmetic sequence for a given first term and common difference.
4. Write a program to find and display the values of nCr and nPr.
5. Write a program to find and display the sum of harmonic series

1+½+⅓+¼+...+1/n.

1. Write a program to check and display whether a number is prime or not.
2. Write a program to display all the factors of a number.
3. Write a program to find the GCD of two numbers.