**Q.1 Perform the following: a. Viewing all databases, creating a Database, viewing all Tables in a Database, Creating Tables (With and Without Constraints), Inserting/Updating/Deleting Records in a Table.**

1. **Viewing all databases:**

Show databases

1. **Creating a database for the college library system:**

Show databases

1. **Viewing all tables in a database (after selecting it):**

CREATE DATABASE library\_system;

1. **Creating tables (with and without constraints) for the college library system:**

CREATE TABLE books (

book\_id INT AUTO\_INCREMENT PRIMARY KEY,

title VARCHAR(255) NOT NULL,

author\_name INT,

);

1. **Inserting records into tables:**

INSERT INTO books (title, author\_id, genre, publication\_year, ISBN)

VALUES (1, 'Wings of fire', 'Dr. A.P.J.Abdul Kalam');

1. **Updating records in a table:**

UPDATE books SET title = 'Agnipankh' WHERE book\_id = 1;

1. **Deleting records from a table:**

DELETE FROM books WHERE book\_id = 1;

**Q.2 Write a Pl/SQL program using FOR loop to insert ten rows into a database table.**

DECLARE

x NUMBER := 100;

BEGIN

FOR i IN 1..10 LOOP

IF MOD(i,2) = 0 THEN

-- i is even

INSERT INTO temp VALUES (i, x, 'i is even');

ELSE

INSERT INTO temp VALUES (i, x, 'i is odd');

END IF;

x := x + 100;

END LOOP;

COMMIT;

END;

**Q.3 Given the table EMPLOYEE (EmpNo, Name, Salary, Designation, DeptID) write a cursor to select the five highest paid employees from the table.**

**Creating Database:**

CREATE geeks;

**To use this database:**

USE geeks;

**This is our table in the** **geeks database:**

CREATE TABLE department(

ID int,

SALARY int,

NAME Varchar(20),

DEPT\_ID Varchar(255));

**Add value into the table:**

INSERT INTO department VALUES (1, 34000, 'ANURAG', 'UI DEVELOPERS');

INSERT INTO department VALUES (2, 33000, 'harsh', 'BACKEND DEVELOPERS');

INSERT INTO department VALUES (3, 36000, 'SUMIT', 'BACKEND DEVELOPERS');

INSERT INTO department VALUES (4, 36000, 'RUHI', 'UI DEVELOPERS');

INSERT INTO department VALUES (5, 37000, 'KAE', 'UI DEVELOPERS');

SELECT DEPT\_ID, MAX(SALARY) FROM department GROUP BY DEPT\_ID;

**Q.4Given an integer i, write a PL/SQL procedure to insert the tuple (i, 'xxx') into a given relation.**

CREATE TABLE employee (

emp\_id INTEGER,

emp\_name VARCHAR2(100)

);

CREATE OR REPLACE PROCEDURE InsertTuple (

i IN INTEGER,

relation\_name IN VARCHAR2

)

IS

BEGIN

EXECUTE IMMEDIATE 'INSERT INTO ' || relation\_name || ' VALUES (:1, :2)'

USING i, 'xxx';

COMMIT;

DBMS\_OUTPUT.PUT\_LINE('Tuple (' || i || ', ''xxx'') inserted into ' || relation\_name || ' successfully.');

EXCEPTION

WHEN OTHERS THEN

DBMS\_OUTPUT.PUT\_LINE('Error: ' || SQLERRM);

END;

BEGIN

InsertTuple(101, 'employee');

END;

SELECT \* FROM employee;