VtuCode

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BCS403 Program 1

**1. Create a table called Employee & execute the following.
Employee(EMPNO,ENAME,JOB, MANAGER_NO, SAL, COMMISSION)**

◉ Create a user and grant all permissions to theuser.
◉ Insert the any three records in the employee table contains attributes.
◉ EMPNO,ENAME JOB, MANAGER_NO, SAL, COMMISSION and use rollback. Check the result.
◉ Add primary key constraint and not null constraint to the employee table.
◉ Insert null values to the employee table and verify the result.

Step 1: Create a user and grant all permissions:

```
-- Connect as a privileged user (e.g., SYS or SYSTEM)
CREATE USER emp_user IDENTIFIED BY password;

-- Grant necessary privileges to emp_user (adjust privileges as needed)
GRANT CONNECT, RESOURCE, DBA TO emp_user;
```

Step 2: Create the Employee table and insert records using rollback:

```
-- Connect as the newly created user
CONNECT emp_user/password

-- Create the Employee table
CREATE TABLE Employee (
    EMPNO NUMBER,
    ENAME VARCHAR2(50),
    JOB VARCHAR2(50),
    MANAGER_NO NUMBER,
    SAL NUMBER,
    COMMISSION NUMBER
```

```
  );


  -- Insert three records into the Employee table
  INSERT INTO Employee (EMPNO, ENAME, JOB, MANAGER_NO, SAL, COMMISSION)
  VALUES (1, 'John Doe', 'Manager', NULL, 5000, 1000);

  INSERT INTO Employee (EMPNO, ENAME, JOB, MANAGER_NO, SAL, COMMISSION)
  VALUES (2, 'Jane Smith', 'Developer', 1, 4000, NULL);

  INSERT INTO Employee (EMPNO, ENAME, JOB, MANAGER_NO, SAL, COMMISSION)
  VALUES (3, 'Michael Brown', 'Analyst', 1, 4500, 500);


  -- Use rollback to undo the insertions
  ROLLBACK;


  -- Check that the records were rolled back (should return 0 rows)
  SELECT * FROM Employee;
```

Step 4: Add primary key constraint and not null constraint:

```
  -- Alter table to add primary key constraint on EMPNO
  ALTER TABLE Employee
  ADD CONSTRAINT pk_employee PRIMARY KEY (EMPNO);



  -- Alter table to add NOT NULL constraints on required columns
  ALTER TABLE Employee
  MODIFY (ENAME VARCHAR2(50) NOT NULL,
          JOB VARCHAR2(50) NOT NULL,
          SAL NUMBER NOT NULL);
```

Step 5: Insert null values to the employee table and verify the result:

```
  -- Attempt to insert a record with a NULL value in a NOT NULL column (ENAME)
  INSERT INTO Employee (EMPNO, ENAME, JOB, MANAGER_NO, SAL, COMMISSION)
  VALUES (4, NULL, 'Tester', 2, 3000, 200);


  -- This insert will fail due to the NOT NULL constraint on ENAME


  -- Check the result by querying the table
  SELECT * FROM Employee;
```