Ex.No.: 2		DATA MANIPULATIONS
Date:		

Create the following tables with the given structure.

EMPLOYEES TABLE

NAME	NULL?	TYPE
Employee_id	Not null	Number(6)
First_Name		Varchar(20)
Last_Name	Not null	Varchar(25)
Email	Not null	Varchar(25)
Phone_Number		Varchar(20)
Hire_date	Not null	Date
Job_id	Not null	Varchar(10)
Salary		Number(8,2)
Commission_pct		Number(2,2)
Manager_id		Number(6)
Department_id		Number(4)

(a) Find out the employee id, names, salaries of all the employees

```
SELECT  Employee_id ,
        First_name || ' ' || Last_name  As  Full_name, Salary
        FROM  EMPLOYEES;
```

(b) List out the employees who works under manager 100

```
SELECT  Employee_id,
        First_Name || ' ' || Last_name  As  Full_Name,
        Manager_Id
FROM Employees  WHERE  Manager_Id = 100;
```

(c) Find the names of the employees who have a salary greater than or equal to 4800

```
SELECT  First_Name || ' ' || Last_Name  AS  Full_Name,
        Salary
FROM  EMPLOYEES
WHERE  Salary >= 4800;
```

(2) BEGIN

```
FOR r IN (
    SELECT 1 AS EmpNo, 'Alice' AS EmpName, 'Analyst' AS Job, 4000 AS Basic FROM DUAL UNION ALL
    SELECT 2, 'Bob', 'clerk', 3500 FROM DUAL UNION ALL
    SELECT 3, 'Carol', 'manager', 3500 FROM DUAL UNION ALL
    SELECT 4, 'Dave', 'clerk', 3000 FROM DUAL UNION ALL
    SELECT 5, 'Eve', 'Analyst', 4500 FROM DUAL
) LOOP
    INSERT INTO Emp (
        EmpNo, EmpName, Job, Basic, DA, HRA, PF, GrossPay,
        NetPay )
    VALUES (
        r.EmpNo, r.EmpName, r.Job, r.Basic,
        r.Basic * 0.30, r.Basic * 0.40, r.Basic * 0.10,
        r.Basic + (r.Basic * 0.30) + (r.Basic * 0.40),
            (r.Basic + (r.Basic * 0.30) +
            (r.Basic * 0.40)));
END LOOP;
COMMIT;
END;
```

```
CREATE TABLE Emp (
    EmpNo      NUMBER(4) PRIMARY KEY,
    EmpName    VARCHAR2(30) NOT NULL,
    Job        VARCHAR2(20),
    Basic      NUMBER(9,2) NOT NULL,
    DA         NUMBER(9,2),
    HRA        NUMBER(9,2),
    PF         NUMBER(9,2),
    GrossPay   NUMBER(9,2),
    NetPay     NUMBER(9,2)
);
```

(d) List out the employees whose last name is 'AUSTIN'

```
SELECT Employee_Id,
       First_Name || ' ' || LastName AS Full_Name
FROM EMPLOYEES
WHERE LastName = 'AUSTIN';
```

(e) Find the names of the employees who works in departments 60,70 and 80

```
SELECT Employee_Id,
       First_Name || ' ' || Last_Name AS Full_Name,
       Department_Id
FROM EMPLOYEES WHERE Department_Id IN (60,70,80);
```

(f) Display the unique Manager_Id.

```
SELECT DISTINCT Manager_Id
FROM EMPLOYEES
WHERE Manger_Id IS NOT NULL;
```

Create an Emp table with the following fields: (EmpNo, EmpName, Job,Basic, DA, HRA,PF, GrossPay, NetPay) (Calculate DA as 30% of Basic and HRA as 40% of Basic)

(a) Insert Five Records and calculate GrossPay and NetPay.

(b) Display the employees whose Basic is lowest in each department.

```
SELECT * FROM Emp
WHERE Basic = (SELECT MIN(Basic) From Emp);
```

(c) If Net Pay is less than

```
SELECT * FROM Emp
WHERE NetPay < PF;
```

DEPARTMENT TABLE

NAME	NULL?	TYPE
Dept_id	Not null	Number(6)
Dept_name	Not null	Varchar(20)
Manager_id		Number(6)
Location_id		Number(4)

JOB_GRADE TABLE

NAME	NULL?	TYPE
Grade_level		Varchar(2)
Lowest_sal		Number
Highest_sal		Number

LOCATION TABLE

NAME	NULL?	TYPE
Location_id	Not null	Number(4)
St_addr		Varchar(40)
Postal_code		Varchar(12)
City	Not null	Varchar(30)
State_province		Varchar(25)
Country_id		Char(2)

1. Create the DEPT table based on the DEPARTMENT following the table instance chart below. Confirm that the table is created.

Column name	ID	NAME
Key Type		
Nulls/Unique		
FK table		
FK column		
Data Type	Number	Varchar2
Length	7	25

2. CREATE TABLE EMP (

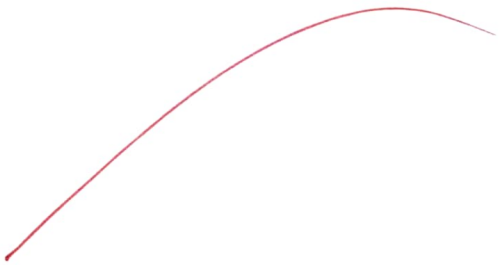
ID Number (7) PRIMARY KEY,

LAST_NAME VARCHAR2(25),

FIRST_NAME VARCHAR2(25),

DEPT_ID NUMBER (7),

FOREIGN KEY (DEPTID) REFERENCES DEPTID));



2. Create the EMP table based on the following instance chart. Confirm that the table is created.

Column name	ID	LAST_NAME	FIRST_NAME	DEPT_ID
Key Type				
Nulls/Unique				
FK table				
FK column				
Data Type	Number	Varchar2	Varchar2	Number
Length	7	25	25	7

3 Modify the EMP table to allow for longer employee last names. Confirm the modification.(Hint: Increase the size to 50)

```
ALTER TABLE EMP
    MODIFY (LAST_NAME VARCHAR2 (50));
```

4 Create the EMPLOYEES2 table based on the structure of EMPLOYEES table. Include Only the Employee_id, First_name, Last_name, Salary and Dept_id coloumns. Name the columns Id, First_name, Last_name, salary and Dept_id respectively.

```
CREATE TABLE EMPLOYEES AS
SELECT Employee_id AS Id, First_name, Last_name,
                    Salary, Department_id AS Dept_id

FROM EMPLOYEES
```

5 Drop the EMP table.

```
DROP TABLE EMP;
```

6 Rename the EMPLOYEES2 table as EMP.

```
RENAME EMPLOYEES2 TO EMP;
```

7 Add a comment on DEPT and EMP tables. Confirm the modification by describing the table.

```
COMMENT ON TABLE DEPT IS 'DEPARTMENT MASTER TABLE';
COMMENT ON TABLE EMP IS 'EMPLOYEE MASTER TABLE';
DESC DEPT;
DESC EMP;
```

8 Drop the First_name column from the EMP table and confirm it.

```
ALTER TABLE EMP
DROP COLUMN First_Name;
DESC EMP
```

Evaluation Procedure	Marks awarded
Query(5)	
Execution (5)	
Viva(5)	
Total (15)	
Faculty Signature	

RESULT :

Thus all the above SQL statements were executed.