

## Data Manipulations

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

```
SELECT Employee_id, First_Name, Last_Name, Salary FROM EMPLOYEES;
```

-- (b) List out the employees who work under manager 100

```
SELECT Employee_id, First_Name, Last_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 Employee_id, First_Name, Last_Name, Salary  
FROM EMPLOYEES  
WHERE Salary >= 4800;
```

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

```
SELECT Employee_id, First_Name, Last_Name  
FROM EMPLOYEES  
WHERE UPPER(Last_Name) = 'AUSTIN';
```

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

```
SELECT Employee_id, First_Name, Last_Name, Department_id  
FROM EMPLOYEES  
WHERE Department_id IN (60, 70, 80);
```

-- (f) Display the unique Manager\_Id

```
SELECT DISTINCT Manager_id FROM EMPLOYEES;
```

-- Create EMP table

```
CREATE TABLE EMP (  
    EmpNo NUMBER(6),  
    EmpName VARCHAR2(25),  
    Job VARCHAR2(20),
```

```
Basic NUMBER(8,2),
DA NUMBER(8,2),
HRA NUMBER(8,2),
PF NUMBER(8,2),
GrossPay NUMBER(10,2),
NetPay NUMBER(10,2)
);
```

```
-- (a) Insert five records and calculate DA (30%), HRA (40%), PF (10%), GrossPay, NetPay
INSERT INTO EMP (EmpNo, EmpName, Job, Basic, DA, HRA, PF, GrossPay, NetPay)
VALUES (1, 'Ravi', 'Manager', 20000, 0.3*20000, 0.4*20000, 0.1*20000,
(20000+0.3*20000+0.4*20000), (20000+0.3*20000+0.4*20000)-(0.1*20000));
```

```
INSERT INTO EMP VALUES (2, 'Kumar', 'Clerk', 12000, 0.3*12000, 0.4*12000, 0.1*12000,
(12000+0.3*12000+0.4*12000), (12000+0.3*12000+0.4*12000)-(0.1*12000));
```

```
INSERT INTO EMP VALUES (3, 'Meena', 'Analyst', 18000, 0.3*18000, 0.4*18000,
0.1*18000, (18000+0.3*18000+0.4*18000), (18000+0.3*18000+0.4*18000)-(0.1*18000));
```

```
INSERT INTO EMP VALUES (4, 'Arun', 'Salesman', 15000, 0.3*15000, 0.4*15000,
0.1*15000, (15000+0.3*15000+0.4*15000), (15000+0.3*15000+0.4*15000)-(0.1*15000));
```

```
INSERT INTO EMP VALUES (5, 'Priya', 'HR', 25000, 0.3*25000, 0.4*25000, 0.1*25000,
(25000+0.3*25000+0.4*25000), (25000+0.3*25000+0.4*25000)-(0.1*25000));
```

```
-- Display inserted data
```

```
SELECT * FROM EMP;
```

```
-- (b) Display employees whose Basic is the lowest (assuming department field existed)
```

```
-- Here we simply display the employee with the minimum Basic
```

```
SELECT * FROM EMP
```

```
WHERE Basic = (SELECT MIN(Basic) FROM EMP);
```

```
-- (c) If Net Pay is less than a certain value (e.g., 20000), display them
```

```
SELECT * FROM EMP
```

```
WHERE NetPay < 20000;
```

```
-- 1. Create DEPT table based on DEPARTMENT structure
```

```
CREATE TABLE DEPT (
    ID NUMBER(7) NOT NULL,
    NAME VARCHAR2(25) NOT NULL
);
```

-- 2. Create EMP table based on instance chart

```
CREATE TABLE EMP (
    ID NUMBER(7),
    LAST_NAME VARCHAR2(25),
    FIRST_NAME VARCHAR2(25),
    DEPT_ID NUMBER(7)
);
```

-- 3. Modify EMP table to allow longer last names (increase size to 50)

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

-- 4. Create EMPLOYEES2 table based on EMPLOYEES structure (selected columns only)

```
CREATE TABLE EMPLOYEES2 AS
SELECT Employee_id AS Id,
       First_name,
       Last_name,
       Salary,
       Department_id AS Dept_id
FROM EMPLOYEES
WHERE 1=0; -- copies structure only, no data
```

-- 5. Drop the EMP table

```
DROP TABLE EMP;
```

-- 6. Rename EMPLOYEES2 table as EMP

```
RENAME EMPLOYEES2 TO EMP;
```

-- 7. Add a comment on DEPT and EMP tables

```
COMMENT ON TABLE DEPT IS 'Department details table';
```

```
COMMENT ON TABLE EMP IS 'Employee details table';
```

-- Confirm comments

```
SELECT * FROM USER_TAB_COMMENTS WHERE TABLE_NAME IN ('DEPT','EMP');
```

-- 8. Drop First\_name column from EMP table and confirm

```
ALTER TABLE EMP DROP COLUMN First_name;
```

-- Confirm structure

```
DESC EMP;
```