

Exp-2

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| | | |
|-----------|------------|--------------------|
| Ex.No.: 2 | | DATA MANIPULATIONS |
| Date: | 08/08/2024 | |

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

`select Employee_id, First_Name, Salary from EMPLOYEES;`

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

`select First_Name || ' ' || Last_Name as name 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 name from EMPLOYEES
Where salary >= 4800;`

| NAME |
|-----------------|
| Emma Stone |
| Brie Larson |
| Elizabeth Olsen |
| Cate Austin |
| Robert Downey |
| Karen Gillan |
| Sebastian Stan |
| Karl Austin |
| Chris Evans |

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

`select First_Name || ' ' || Last_Name as name from EMPLOYEES
where Last_Name = 'Austin';`

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

```
select First_Name || ' ' || Last_Name as name from EMPLOYEES
where Department_id in (60,70,80);
```

| NAME |
|------------------|
| Chadwick Boseman |
| Jeremy Austin |
| Tessa Thompson |
| Zoe Austin |
| Pom Klementieff |

5 rows returned in 0.01 seconds [Download](#)

f) Display the unique Manager_Id.

```
select DISTINCT(manager_id) from EMPLOYEES;
```

| MANAGER_ID |
|------------|
| 400 |
| 200 |
| 350 |
| 300 |
| 250 |
| 450 |
| 600 |
| 550 |
| 900 |
| 800 |

More than 10 rows available. Increase rows selector to view more rows.

10 rows returned in 0.00 seconds [Download](#)

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

```
INSERT INTO Emp (EmpNo, EmpName, Job, Basic, DA, HRA, PF, GrossPay, NetPay)
VALUES (
101, 'John Doe', 'Manager', 50000, 15000, 20000, 6000,0,0 ,
```

```

102, 'Jane Smith', 'Developer', 40000, 12000, 16000, 4800,0,0 ,
103, 'Alice Johnson', 'Analyst', 35000, 10500, 14000, 4200,0,0 ,
104, 'Bob Brown', 'Designer', 30000, 9000, 12000, 3600,0,0 ,
105, 'Charlie Davis', 'Tester', 25000, 7500, 10000, 3000,0,0
)

```

```

update emp
set GrossPay = Basic+DA+HRA
where Grosspay = 0;

```

```

update emp
set NetPay = Grosspay - PF
where Netpay = 0;

```

(b) Display the employees whose Basic is lowest in each department.[select](#)

```

job,min(basic) from Emp
group by Job;

```

The screenshot shows the Oracle APEX SQL Workshop interface. The SQL command entered is `select job, min(basic) from Emp group by Job;`. The results are displayed in a table with the following data:

| JOB | MIN(BASIC) |
|-----------|------------|
| Designer | 30000 |
| Developer | 40000 |
| Tester | 25000 |
| Manager | 50000 |
| Analyst | 35000 |

5 rows returned in 0.00 seconds

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

Create table DEPT(

```

    ID Number(7),
    Name varchar(25)
);

```

Desc DEPT;

Object Type **TABLE** Object **DEPT**

| Table | Column | Data Type | Length | Precision | Scale | Primary Key | Nullable | Default | Comment |
|-------------|-------------|-----------|--------|-----------|-------|-------------|----------|---------|---------|
| <u>DEPT</u> | <u>ID</u> | NUMBER | - | 7 | 0 | - | ✓ | - | - |
| | <u>NAME</u> | VARCHAR2 | 25 | - | - | - | ✓ | - | - |
| | | | | | | | | | 1 - 2 |

2) Create the EMP1 table based on the following instance chart. Confirm that the table is created.

```

create table EMP1(
    ID Number(7),
    First_name  varchar(25),
    Last_name   varchar(25),
    Dept_id Number(7)
);

```

Desc EMP1;

Object Type **TABLE** Object **EMPS**

| Table | Column | Data Type | Length | Precision | Scale | Primary Key | Nullable | Default | Comment |
|-------------|-------------------|-----------|--------|-----------|-------|-------------|----------|---------|---------|
| <u>EMPS</u> | <u>ID</u> | NUMBER | - | 7 | 0 | - | ✓ | - | - |
| | <u>LAST_NAME</u> | VARCHAR2 | 25 | - | - | - | ✓ | - | - |
| | <u>FIRST_NAME</u> | VARCHAR2 | 25 | - | - | - | ✓ | - | - |
| | <u>DEPT_ID</u> | NUMBER | - | 7 | 0 | - | ✓ | - | - |
| | | | | | | | | | 1 - 4 |

3) Modify the EMP1 table to allow for longer employee last names. Confirm the modification.(Hint: Increase the size to 50)

```

ALTER TABLE EMP1
modify Last_name varchar(50);

```

Object Type **TABLE** Object **EMPS**

| Table | Column | Data Type | Length | Precision | Scale | Primary Key | Nullable | Default | Comment |
|-------------|-------------------|-----------|--------|-----------|-------|-------------|----------|---------|---------|
| <u>EMPS</u> | <u>ID</u> | NUMBER | - | 7 | 0 | - | ✓ | - | - |
| | <u>LAST_NAME</u> | VARCHAR2 | 50 | - | - | - | ✓ | - | - |
| | <u>FIRST_NAME</u> | VARCHAR2 | 25 | - | - | - | ✓ | - | - |
| | <u>DEPT_ID</u> | NUMBER | - | 7 | 0 | - | ✓ | - | - |
| | | | | | | | | | 1 - 4 |

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 EMPLOYEES2(ID
    Number(10), First_name
    varchar(50), Last_name
    varchar(50), Salary
    Number(10), Dept_id
    Number(10)
);
```

5) Drop the EMP1 table.

```
drop table EMP1;
```

6) Rename the EMPLOYEES2 table as EMP1.

```
ALTER TABLE EMPLOYEES2 RENAME TO EMP1;
```

7) Add a comment on DEPT and EMP1 tables. Confirm the modification by describing the table.

```
comment on TABLE DEPT IS 'this table contains the fields ID and NAME..';
```

```
SELECT TABLE_NAME, COMMENTS
FROM USER_TAB_COMMENTS
```

Object Type **TABLE** Object **EMPS**

| Table | Column | Data Type | Length | Precision | Scale | Primary Key | Nullable | Default | Comment |
|-------------|--------------------|-----------|--------|-----------|-------|-------------|----------|---------|---------|
| <u>EMPS</u> | <u>EMPLOYEE_ID</u> | NUMBER | - | 9 | 0 | - | ✓ | - | - |
| | <u>FIRST_NAME</u> | VARCHAR2 | 25 | - | - | - | ✓ | - | - |
| | <u>LAST_NAME</u> | VARCHAR2 | 25 | - | - | - | ✓ | - | - |
| | <u>SALARY</u> | NUMBER | - | 9 | 0 | - | ✓ | - | - |
| | <u>DEPT_ID</u> | NUMBER | - | 4 | 0 | - | ✓ | - | - |
| | | | | | | | | | 1 - 5 |

WHERE TABLE_NAME = 'DEPT';

comment on TABLE EMP1 IS 'this table contains the fields ID,first name,lastname,salary,DEPT_id..';

```
SELECT TABLE_NAME, COMMENTS
FROM USER_TAB_COMMENTS
WHERE TABLE_NAME = 'EMP1';
```

Object Type **TABLE** Object **DEPT**

| Table | Column | Data Type | Length | Precision | Scale | Primary Key | Nullable | Default | Comment |
|-------|--------|-----------|--------|-----------|-------|-------------|----------|---------|------------------------|
| DEPT | ID | NUMBER | - | 7 | 0 | - | ✓ | - | Should only be numbers |
| | NAME | VARCHAR2 | 25 | - | - | - | ✓ | - | - |
| 1 - 2 | | | | | | | | | |

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

```
ALTER TABLE EMP1
drop column First_name;
```

| TABLE_NAME | TABLE_TYPE | COMMENTS |
|--|------------|-----------------|
| MY_EMPLOYEE | TABLE | - |
| HTMldb_PLAN_TABLE | TABLE | - |
| EMPS | TABLE | ALL Employees |
| EMP | TABLE | - |
| DEPT | TABLE | ALL Departments |
| DEMO_USERS | TABLE | - |
| DEMO_STATES | TABLE | - |
| DEMO_PRODUCT_INFO | TABLE | - |
| DEMO_ORDER_ITEMS | TABLE | - |
| DEMO_ORDERS | TABLE | - |
| More than 10 rows available. Increase rows selector to view more rows. | | |

