**CREATING NEW TABLE EMP WHOSE STRUCTURE IS AS BELOW:**

CREATE TABLE emp

( empid varchar2(10),

empname varchar(30),

basic number(8,2),

projectid varchar(10),

mobno1 varchar(10),

mobno2 varchar(10)

);

Table created.

**INSERTING VALUES IN THE TABLE EMP WITH USER INPUT:**

INSERT INTO emp values('&employee\_ID','&NAME','&SALARY','&projectID','&mobile\_num1','&mobile\_num2')

SQL> /

Enter value for employee\_id: 17vrj001

Enter value for name: Vraj Desai

Enter value for salary: 70000

Enter value for projectid: BCE01

Enter value for mobile\_num1: 7898687968

Enter value for mobile\_num2:

old 1: INSERT INTO emp values('&employee\_ID','&NAME','&SALARY','&projectID','&mobile\_num1','&mobile\_num2')

new 1: INSERT INTO emp values('17vrj001','Vraj Desai','70000','BCE01','7898687968','')

1 row created.

**SAVING THE ABOVE QUERY TO USE LATER WITH ‘@’ KEYWORD:**

SQL> save insertinto

Created file insertinto

SQL> @insertinto

Enter value for employee\_id: 17dev001

Enter value for name: Dev Joshi

Enter value for salary: 50000

Enter value for projectid: BCE01

Enter value for mobile\_num1: 9897898079

Enter value for mobile\_num2: 9879879889

old 1: INSERT INTO emp values('&employee\_ID','&NAME','&SALARY','&projectID','&mobile\_num1','&mobile\_num2')

new 1: INSERT INTO emp values('17dev001','Dev Joshi','50000','BCE01','9897898079','9879879889')

1 row created.

**FINAL TABLE DATA AFTER ADDING EACH INFROMATION:**

select \* from emp;

EMPID EMPNAME BASIC PROJECTID MOBNO1 MOBNO2

---------- ------------------------------ --------- ---------- ---------- ----------

17vrj001 Vraj Desai 70000 BCE01 7898687968

17dev001 Dev Joshi 50000 BCE01 9897898079 9879879889

17dev002 Dev Gagrani 45456.67 BCE02 8978978967

17ary001 Aaryan Gupta 50000 BCE05 9879987987

17aum001 Aum Naik 40000 BCE02 9890798079 7878678987

17aks001 Akshay Mehta 60000 BCE02 9879776876

17mht001 Mohit Nankani 58000 BCE03 7567879687

17mht002 Mohit Gevariya 60000 BCE04 9787968797

17met001 meet Gamdha 40000 BCE06 8798697869

17dip001 Dipanshi Digga 50000 BCE04 8798879887 8797879878

17anj001 Anuj Gupta 20000 8797896879

17raj001 Raj Mehta 35000 BCH01 8978987978

BCE07

**QUERY TO DISPLAY DETAILS OF EMPLOYEES WHOSE BOTH MOBILE NUMBERS ARE PRESENT IN TABLE:**

select \* from emp

where mobno1 is not null and mobno2 is not null;

EMPID EMPNAME BASIC PROJECTID MOBNO1 MOBNO2

---------- ------------------------------ --------- ---------- ---------- ----------

17dev001 Dev Joshi 50000 BCE01 9897898079 9879879889

17aum001 Aum Naik 40000 BCE02 9890798079 7878678987

17dip001 Dipanshi Digga 50000 BCE04 8798879887 8797879878

**DISPLAYING DETAILS OF EMPLOYEES WHO ARE NOT GIVEN ANY PROJECT:**

select \* from emp

where projectid is null;

EMPID EMPNAME BASIC PROJECTID MOBNO1 MOBNO2

---------- ------------------------------ --------- ---------- ---------- ----------

17anj001 Anuj Gupta 20000 8797896879

**SHOWING DETAILS OF EMPLOYEES WHOSE PROJECT IS FROM CHEMICAL DEPARTMENT:**

select \* from emp

where projectid like '%CH%';

EMPID EMPNAME BASIC PROJECTID MOBNO1 MOBNO2

---------- ------------------------------ --------- ---------- ---------- ----------

17raj001 Raj Mehta 35000 BCH01 8978987978

**SHOWING A PROJECTID WHICH IS NOT YET ALLOCATED TO ANY OF THE EMPLOYEE:**

select projectid from emp

where empid is null;

PROJECTID

----------

BCE07

**DISPLAYING EMPLOYEE’S ID, NAME AND BASIC SALARY SORTED IN ACCSEDING OREDER BY BASIC SALARY:**

select empid,empname,basic from emp order by basic

SQL> /

EMPID EMPNAME BASIC

---------- ------------------------------ ---------

17anj001 Anuj Gupta 20000

17raj001 Raj Mehta 35000

17aum001 Aum Naik 40000

17met001 meet Gamdha 40000

17dev002 Dev Gagrani 45456.67

17dev001 Dev Joshi 50000

17ary001 Aaryan Gupta 50000

17dip001 Dipanshi Digga 50000

17mht001 Mohit Nankani 58000

17aks001 Akshay Mehta 60000

17mht002 Mohit Gevariya 60000

17vrj001 Vraj Desai 70000

13 rows selected.

**TO DISPLAY ALL THE PROJECTS CURRENTLY IN WORKING PROCESS:**

select distinct projectid from emp;

PROJECTID

----------

BCE04

BCE05

BCE01

BCE03

BCE02

BCE07

BCE06

BCH01

9 rows selected.

**ADDING A COLUMN IN TABLE NAMED GRADE AND IF BASIC IS MORE THAN 50K THEN GRADE WILL BE SET TO 1 ELSE 0.**

SQL> update emp

2 set grade = 1

3 where basic >= 50000;

7 rows updated.

Commit complete.

SQL> update emp

2 set grade = 2

3 where basic <50000;

5 rows updated.

Commit complete.

SQL> select \* from emp;

EMPID EMPNAME BASIC PROJECTID MOBNO1 MOBNO2 GRADE

---------- ------------------------------ --------- ---------- ---------- ---------- ---------

17vrj001 Vraj Desai 70000 BCE01 7898687968 1

17dev001 Dev Joshi 50000 BCE01 9897898079 9879879889 1

17dev002 Dev Gagrani 45456.67 BCE02 8978978967 2

17ary001 Aaryan Gupta 50000 BCE05 9879987987 1

17aum001 Aum Naik 40000 BCE02 9890798079 7878678987 2

17aks001 Akshay Mehta 60000 BCE02 9879776876 1

17mht001 Mohit Nankani 58000 BCE03 7567879687 1

17mht002 Mohit Gevariya 60000 BCE04 9787968797 1

17met001 meet Gamdha 40000 BCE06 8798697869 2

17dip001 Dipanshi Digga 50000 BCE04 8798879887 8797879878 1

17anj001 Anuj Gupta 20000 8797896879 2

17raj001 Raj Mehta 35000 BCH01 8978987978 2

BCE07

13 rows selected.

**DELETING COLUMN NAMED MOBNO2 FROM TABLE.**

SQL> alter table emp

2 drop column mobno2;

Table altered.

SQL> select \* from emp;

EMPID EMPNAME BASIC PROJECTID MOBNO1 GRADE

---------- ------------------------------ --------- ---------- ---------- ---------

17vrj001 Vraj Desai 70000 BCE01 7898687968 1

17dev001 Dev Joshi 50000 BCE01 9897898079 1

17dev002 Dev Gagrani 45456.67 BCE02 8978978967 2

17ary001 Aaryan Gupta 50000 BCE05 9879987987 1

17aum001 Aum Naik 40000 BCE02 9890798079 2

17aks001 Akshay Mehta 60000 BCE02 9879776876 1

17mht001 Mohit Nankani 58000 BCE03 7567879687 1

17mht002 Mohit Gevariya 60000 BCE04 9787968797 1

17met001 meet Gamdha 40000 BCE06 8798697869 2

17dip001 Dipanshi Digga 50000 BCE04 8798879887 1

17anj001 Anuj Gupta 20000 8797896879 2

17raj001 Raj Mehta 35000 BCH01 8978987978 2

BCE07

13 rows selected.

**MODIFYING PROJECTID COLUMN TO HAVE ONLY 5 CHAR IN IT:**

1 alter table emp

2\* modify projectid char(5)

SQL> /

Table altered.

SQL> desc emp;

Name Null? Type

----------------------------------------------------- -------- ------------------------------------

EMPID VARCHAR2(10)

EMPNAME VARCHAR2(30)

BASIC NUMBER(8,2)

PROJECTID CHAR(5)

MOBNO1 VARCHAR2(10)

GRADE NUMBER(1)

PROID CHAR(5)

**A SINGLE QUERY TO UPDATE GRADE VALUES WITH GIVEN CONDITIONS:**

**IF BASIC>100000 => GRADE=1**

**1L>=BASIC>50K => GRADE=2**

**50K>=BASIC>10K => GRADE=3**

**BASIC<=10K => GRADE=4**

update emp

set grade = case

when basic > 100000

then 1

when basic <= 100000 and basic > 50000

then 2

when basic <= 50000 and basic > 10000

then 3

else 4

end ;

13 rows updated.

SQL> select \* from emp;

EMPID EMPNAME BASIC PROJE MOBNO1 GRADE

---------- ------------------------------ --------- ----- ---------- --------- -----

17vrj001 Vraj Desai 70000 BCE01 7898687968 2

17dev001 Dev Joshi 50000 BCE01 9897898079 3

17dev002 Dev Gagrani 45456.67 BCE02 8978978967 3

17ary001 Aaryan Gupta 50000 BCE05 9879987987 3

17aum001 Aum Naik 40000 BCE02 9890798079 3

17aks001 Akshay Mehta 60000 BCE02 9879776876 2

17mht001 Mohit Nankani 58000 BCE03 7567879687 2

17mht002 Mohit Gevariya 60000 BCE04 9787968797 2

17met001 meet Gamdha 40000 BCE06 8798697869 3

17dip001 Dipanshi Digga 50000 BCE04 8798879887 3

17anj001 Anuj Gupta 20000 8797896879 3

17raj001 Raj Mehta 35000 BCH01 8978987978 3

BCE07 4

**COUNT IS USED TO FETCH TOTAL ENTRIES IN TABLE:**

select count(\*) from emp;

COUNT(\*)

---------

13

**MAX IS USED TO FETCH MAXIMUM VALUE FOR GIVEN COLUMN FROM ALL THE ROWS:**

SQL> select max(basic) from emp;

MAX(BASIC)

----------

70000

**MIN IS USED TO FETCH MINIMUM VALUE FOR GIVEN COLUMN FROM ALL THE ROWS:**

SQL> select min(basic) from emp;

MIN(BASIC)

----------

20000

**TO FIND TOTAL ROWS, MAX, MIN, AVERAGE AND SUM OF VALUES OF ROWS FROM GIVEN COLUMN:**

select count(\*),max(basic),min(basic),avg(basic),sum(basic) from emp

SQL> /

COUNT(\*) MAX(BASIC) MIN(BASIC) AVG(BASIC) SUM(BASIC)

--------- ---------- ---------- ---------- ----------

13 70000 20000 48204.723 578456.67

**THIS QUERY IS USED TO DISPLAY MAXIMUM BASIC SALARY OF EMPLOYEE IN EACH PROJECT;**

select max(basic),projectid from emp group by projectid

SQL> /

MAX(BASIC) PROJE

---------- -----

60000 BCE04

50000 BCE05

70000 BCE01

58000 BCE03

60000 BCE02

40000 BCE06

35000 BCH01

9 rows selected.