EXP 7

JOIN QUERIES

AIM: To execute join queries in SQL.

1)CREATE AN EMPLOYEE TABLE

```
SQL> create table EMP_387
  2  (
  3  EmpNo number(3),
  4  EName varchar2(30),
  5  Job varchar2(20),
  6  DeptNo number(2),
  7  Sal number(5),
  8  CustHandling number(2)
  9  );

Table created.
```

2)INSERT VALUES IN TABLE

```
SQL> INSERT INTO EMP_387 VALUES (100,'Shushrut Kumar','Manager',01,4000,01);

1 row created.

SQL> INSERT INTO EMP_387 VALUES (101,'Viren Parmar','J.Manager',01,3500,02);

1 row created.

SQL> INSERT INTO EMP_387 VALUES (102,'Vidhi Rai','Analyst',02,5000,03);

1 row created.

SQL> INSERT INTO EMP_387 VALUES (103,'Param Shah','Accountant',02,2500,04);

1 row created.

SQL> INSERT INTO EMP_387 VALUES (104,'Jakin Patel','Assistant',03,2000,04);

1 row created.

SQL> INSERT INTO EMP_387 VALUES (105,'Don Draper','PM',04,1500,05);

1 row created.
```

3)CREATE TABLE DEPARTMENT AND INSERT VALUES

```
SQL> create table DEPT_387(DeptNo number(2), DeptName varchar2(25));

Table created.

SQL> INSERT INTO DEPT_387 VALUES (01,'General Management');

1 row created.

SQL> INSERT INTO DEPT_387 VALUES (02,'Marketing');

1 row created.

SQL> INSERT INTO DEPT_387 VALUES (03,'Human Resource');

1 row created.

SQL> INSERT INTO DEPT_387 VALUES (04,'Sales');

1 row created.

SQL> INSERT INTO DEPT_387 VALUES (05,'Operations');

1 row created.
```

4)CREATE TABLE LOAN AND INSERT VALUES

```
SQL> create table LOAN_387(Lid number(2), CustId number(2), Amount number(6));

Table created.

SQL> INSERT INTO LOAN_387 VALUES (10,03,50000);

1 row created.

SQL> INSERT INTO LOAN_387 VALUES (20,05,35000);

1 row created.

SQL> INSERT INTO LOAN_387 VALUES (30,06,80000);

1 row created.
```

5)CREATE TABLE CUSTOMERS AND INSERT VALUES

```
SQL> create table CUST_387(CustId number(2), CustName varchar2(30));

Table created.

SQL> INSERT INTO CUST_387 VALUES (01,'Michael Scott');

1 row created.

SQL> INSERT INTO CUST_387 VALUES (02,'Jim Duncan');

1 row created.

SQL> INSERT INTO CUST_387 VALUES (03,'Dwight Schrut');

1 row created.

SQL> INSERT INTO CUST_387 VALUES (04,'Pam Besly');

1 row created.

SQL> INSERT INTO CUST_387 VALUES (05,'Kelly Kapoor');

1 row created.

SQL> INSERT INTO CUST_387 VALUES (06,'Ted Mosbey');

1 row created.
```

6) Issue a query to display information about employees who earn more than any employee in dept 1.

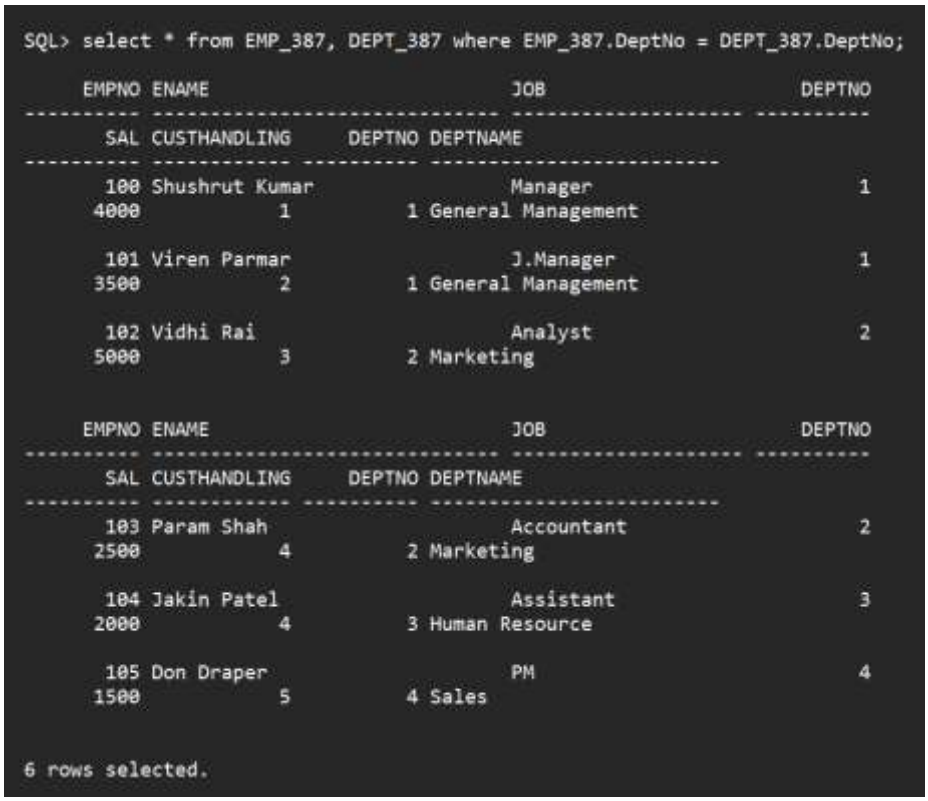
select * from EMP_387 where SAL > (select max(SAL) from EMP_387 where DeptNo = 01);

```
SQL> select * from EMP_387 where SAL > (select max(SAL) from EMP_387 where DeptNo = 01);

     EMPNO ENAME                          JOB                       DEPTNO
---------- ------------------------------ ------------------- ----------
       SAL CUSTHANDLING
---------- ------------
       102 Vidhi Rai                      Analyst                        2
      5000            3
```

7) Display the employee details, departments that the departments are same in both the emp and dept

select * from EMP_387, DEPT_387 where EMP_387.DeptNo = DEPT_387.DeptNo;



```
SQL> select * from EMP_387, DEPT_387 where EMP_387.DeptNo = DEPT_387.DeptNo;

     EMPNO ENAME                          JOB                    DEPTNO
---------- ------------------------------ -------------------- ----------
       SAL CUSTHANDLING     DEPTNO DEPTNAME
---------- ------------ ---------- ------------------------
       100 Shushrut Kumar                 Manager                     1
      4000            1          1 General Management

       101 Viren Parmar                   J.Manager                   1
      3500            2          1 General Management

       102 Vidhi Rai                      Analyst                     2
      5000            3          2 Marketing


     EMPNO ENAME                          JOB                    DEPTNO
---------- ------------------------------ -------------------- ----------
       SAL CUSTHANDLING     DEPTNO DEPTNAME
---------- ------------ ---------- ------------------------
       103 Param Shah                     Accountant                  2
      2500            4          2 Marketing

       104 Jakin Patel                    Assistant                   3
      2000            4          3 Human Resource

       105 Don Draper                     PM                          4
      1500            5          4 Sales


6 rows selected.
```

8) Display the employee details, departments that the departments are not same in both the emp and dept.

select * from EMP_387, DEPT_387 where EMP_387.DeptNo != DEPT_387.DeptNo;

```
SQL> select * from EMP_387, DEPT_387 where EMP_387.DeptNo != DEPT_387.DeptNo;

     EMPNO ENAME                          JOB                       DEPTNO
---------- ------------------------------ -------------------- ----------
       SAL CUSTHANDLING     DEPTNO DEPTNAME
---------- ------------ ---------- -------------------------
       102 Vidhi Rai                      Analyst                        2
      5000            3          1 General Management

       103 Param Shah                     Accountant                     2
      2500            4          1 General Management

       104 Jakin Patel                    Assistant                      3
      2000            4          1 General Management


     EMPNO ENAME                          JOB                       DEPTNO
---------- ------------------------------ -------------------- ----------
       SAL CUSTHANDLING     DEPTNO DEPTNAME
---------- ------------ ---------- -------------------------
       105 Don Draper                     PM                             4
      1500            5          1 General Management

       100 Shushrut Kumar                 Manager                        1
      4000            1          2 Marketing

       101 Viren Parmar                   J.Manager                      1
      3500            2          2 Marketing


     EMPNO ENAME                          JOB                       DEPTNO
---------- ------------------------------ -------------------- ----------
       SAL CUSTHANDLING     DEPTNO DEPTNAME
---------- ------------ ---------- -------------------------
       104 Jakin Patel                    Assistant                      3
      2000            4          2 Marketing

       105 Don Draper                     PM                             4
      1500            5          2 Marketing

       100 Shushrut Kumar                 Manager                        1
      4000            1          3 Human Resource


     EMPNO ENAME                          JOB                       DEPTNO
---------- ------------------------------ -------------------- ----------
       SAL CUSTHANDLING     DEPTNO DEPTNAME
---------- ------------ ---------- -------------------------
       101 Viren Parmar                   J.Manager                      1
      3500            2          3 Human Resource

       102 Vidhi Rai                      Analyst                        2
      5000            3          3 Human Resource
```

9) . Display the details of those who draw the salary greater than the average salary

select * from EMP_387 where SAL > (select avg(SAL) from EMP_387);

```
SQL> select * from EMP_387 where SAL > (select avg(SAL) from EMP_387);

     EMPNO ENAME                          JOB                       DEPTNO
---------- ------------------------------ ------------------ ----------
       SAL CUSTHANDLING
---------- ------------
       100 Shushrut Kumar                 Manager                        1
      4000            1

       101 Viren Parmar                   J.Manager                      1
      3500            2

       102 Vidhi Rai                      Analyst                        2
      5000            3
```

10) Display the Employee name by implementing a left outer join.

select EName from EMP_387 left outer join DEPT_387 on EMP_387.DeptNo = DEPT_387.DeptNo;

```
SQL> select EName from EMP_387 left outer join DEPT_387 on EMP_387.DeptNo = DEPT_387.DeptNo;

ENAME
------------------------------
Shushrut Kumar
Viren Parmar
Vidhi Rai
Param Shah
Jakin Patel
Don Draper

6 rows selected.
```

11) CREATE TABLE STUD_387 AND INSERT VALUES

```
SQL> create table STUD_387(RegNo number(2), Name varchar2(30));

Table created.

SQL> INSERT INTO STUD_387 VALUES (01,'Shushrut Kumar');

1 row created.

SQL> INSERT INTO STUD_387 VALUES (02,'Viren Parmar');

1 row created.

SQL> INSERT INTO STUD_387 VALUES (03,'Vidhi Rai');

1 row created.

SQL> INSERT INTO STUD_387 VALUES (04,'Param Shah');

1 row created.

SQL> INSERT INTO STUD_387 VALUES (05,'Jakin Patel');

1 row created.

SQL> INSERT INTO STUD_387 VALUES (06,'Don Draper');

1 row created.
```

12) CREATE TABLE GRAD_387 AND INSERT VALUES

13) CREATE TABLE RESULT_387 AND INSERT VALUES

```
SQL> create table GRADE_387(RegNo number(2), grade varchar2(1));

Table created.

SQL> INSERT INTO GRADE_387 VALUES (01,'O');

1 row created.

SQL> INSERT INTO GRADE_387 VALUES (02,'A');

1 row created.

SQL> INSERT INTO GRADE_387 VALUES (03,'B');

1 row created.

SQL> INSERT INTO GRADE_387 VALUES (04,'C');

1 row created.

SQL> INSERT INTO GRADE_387 VALUES (05,'D');

1 row created.

SQL> INSERT INTO GRADE_387 VALUES (06,'E');

1 row created.
```

```
SQL> create table RESULT_387(RegNo number(2), Result varchar2(4));

Table created.

SQL> INSERT INTO RESULT_387 VALUES (01,'PASS');

1 row created.

SQL> INSERT INTO RESULT_387 VALUES (02,'PASS');

1 row created.

SQL> INSERT INTO RESULT_387 VALUES (03,'PASS');

1 row created.

SQL> INSERT INTO RESULT_387 VALUES (04,'PASS');

1 row created.

SQL> INSERT INTO RESULT_387 VALUES (05,'FAIL');

1 row created.

SQL> INSERT INTO RESULT_387 VALUES (06,'FAIL');

1 row created.
```

14) Display the Student Name,register no and result by implementing a right outer join

select STUD_387.RegNo, Name, Result from STUD_387 right outer join RESULT_387 on STUD_387.RegNo = RESULT_387.RegNo;

```
SQL> select STUD_387.RegNo, Name, Result from STUD_387 right outer join RESULT_387 on STUD_387.RegNo = RESULT_387.RegNo;

     REGNO NAME                           RESU
---------- ------------------------------ ----
         1 Shushrut Kumar                 PASS
         2 Viren Parmar                   PASS
         3 Vidhi Rai                      PASS
         4 Param Shah                     PASS
         5 Jakin Patel                    FAIL
         6 Don Draper                     FAIL

6 rows selected.
```

15) Display the Student name by implementing full outer join

select Name from STUD_387 full outer join GRADE_387 on STUD_387.RegNo = GRADE_387.RegNo;

```
SQL> select Name from STUD_387 full outer join GRADE_387 on STUD_387.RegNo = GRADE_387.RegNo

NAME
------------------------------
Shushrut Kumar
Viren Parmar
Vidhi Rai
Param Shah
Jakin Patel
Don Draper

6 rows selected.
```

16) Get all combinations of emp and cust information such that the emp and cust are co-located

select EmpNo, EName, CustName from EMP_387, CUST_387 where EMP_387.CustHandling = CUST_387.CustId;

```
SQL> select EmpNo, EName, CustName from EMP_387, CUST_387 where EMP_387.CustHandling = CUST_387.CustId;

     EMPNO ENAME                          CUSTNAME
---------- ------------------------------ ------------------------------
       100 Shushrut Kumar                 Michael Scott
       101 Viren Parmar                   Jim Duncan
       102 Vidhi Rai                      Dwight Schrut
       103 Param Shah                     Pam Besly
       104 Jakin Patel                    Pam Besly
       105 Don Draper                     Kelly Kapoor

6 rows selected.
```

17) Display the employee number,employee name and department name of the employees who are working for some department

select EmpNo, EName, DeptName from EMP_387, DEPT_387 where EMP_387.DeptNo = DEPT_387.DeptNo;

```
SQL> select EmpNo, EName, DeptName from EMP_387, DEPT_387 where EMP_387.DeptNo = DEPT_387.DeptNo;

     EMPNO ENAME                          DEPTNAME
---------- ------------------------------ -------------------------
       100 Shushrut Kumar                 General Management
       101 Viren Parmar                   General Management
       102 Vidhi Rai                      Marketing
       103 Param Shah                     Marketing
       104 Jakin Patel                    Human Resource
       105 Don Draper                     Sales

6 rows selected.
```

18)Display the first and last name of customer who have taken loan

select CustName, Lid, Amount from CUST_387, LOAN_387 where CUST_387.CustId = LOAN_387.CustId;

```
SQL> select CustName, Lid, Amount from CUST_387, LOAN_387 where CUST_387.CustId = LOAN_387.CustId;

CUSTNAME                         LID     AMOUNT
------------------------------ ---------- ----------
Dwight Schrut                     10      50000
Kelly Kapoor                      20      35000
Ted Mosbey                        30      80000
```

<u>RESULT:</u> Join queries in SQL are successfully implemented and executed

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