ASSIGNMENT-5

Name: Shangirne Kharbanda

Registration Number: 20BAI1154

Slot : L47 + L48

Create an EMPLOYEE Table with the following attributes

EMPID, EMPNAME, JOB, DOB, SALARY, DEPTNO, GENDER

```
SQL> CREATE TABLE EMPLOYEE_20BAI1154(
  2  EMPID INT NOT NULL,
  3  EMPNAME VARCHAR2(30) NOT NULL,
  4  JOB VARCHAR2(30) NOT NULL,
  5  DOB DATE NOT NULL,
  6  SALARY INT NOT NULL,
  7  DEPTNO INT NOT NULL,
  8  GENDER VARCHAR2(30) NOT NULL);

Table created.

SQL> DESC EMPLOYEE_20BI1154;
ERROR:
ORA-04043: object EMPLOYEE_20BI1154 does not exist


SQL> DESC EMPLOYEE_20BAI1154;
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 EMPID                                     NOT NULL NUMBER(38)
 EMPNAME                                   NOT NULL VARCHAR2(30)
 JOB                                       NOT NULL VARCHAR2(30)
 DOB                                       NOT NULL DATE
 SALARY                                    NOT NULL NUMBER(38)
 DEPTNO                                    NOT NULL NUMBER(38)
 GENDER                                    NOT NULL VARCHAR2(30)

SQL>
```

```
SQL> INSERT ALL
  2  INTO EMPLOYEE_20BAI1154 VALUES(1,'RICK','MANAGER','12-AUG-01',20000,100,'MALE')
  3  INTO EMPLOYEE_20BAI1154 VALUES(2,'CHARLOTTE','SUPERVISOR','11-APR-02',15000,101,'FEMALE')
  4  INTO EMPLOYEE_20BAI1154 VALUES(3,'MARGEARY','ASSISTANT MANAGER','26-OCT-02',10000,102,'FEMALE')
  5  INTO EMPLOYEE_20BAI1154 VALUES(4,'MARTY','SALES EXECUTIVE','17-AUG-01',8000,103,'MALE')
  6  INTO EMPLOYEE_20BAI1154 VALUES(5,'VICTORIA','HR MANAGER','16-APR-01',11000,104,'FEMALE')
  7  INTO EMPLOYEE_20BAI1154 VALUES(6,'TYRION','JANITOR','05-OCT-15',3000,105,'MALE')
  8  INTO EMPLOYEE_20BAI1154 VALUES(7,'JAMIE','JANITOR','14-JUL-15',2000,106,'MALE')
  9  INTO EMPLOYEE_20BAI1154 VALUES(8,'EVA','RECEPTIONIST','27-APR-02',6000,107,'FEMALE')
 10  INTO EMPLOYEE_20BAI1154 VALUES(9,'ANDREA','SECRETARY','11-AUG-01',7000,108,'FEMALE')
 11  INTO EMPLOYEE_20BAI1154 VALUES(10,'XAVIER','HANDLER OF OPERATIONS','03-OCT-01',11000,109,'MALE')
 12  SELECT * FROM DUAL;

10 rows created.
```

1. Calculate the square root of the salary of all employees.

Ans 1.

```
SQL> SELECT SQRT(SALARY) AS SQUARE_ROOT_OF_SALARY FROM EMPLOYEE_20BAI1154;

SQUARE_ROOT_OF_SALARY
---------------------
           141.421356
           122.474487
                  100
           89.4427191
           104.880885
           54.7722558
           44.7213595
           77.4596669
           83.6660027
           104.880885

10 rows selected.

SQL>
```

2. Apply any other five numeric built in function to ‘salary’ attribute of employee table.

```
SQL> SELECT POWER(SALARY,2) FROM EMPLOYEE_20BAI1154;

POWER(SALARY,2)
---------------
      400000000
      225000000
      100000000
       64000000
      121000000
        9000000
        4000000
       36000000
       49000000
      121000000

10 rows selected.

SQL> SELECT MOD(SALARY,2) FROM EMPLOYEE_20BAI1154;

MOD(SALARY,2)
-------------
            0
            0
            0
            0
            0
            0
            0
            0
            0
            0

10 rows selected.
```

```
SQL> SELECT SIGN(SALARY) FROM EMPLOYEE_20BAI1154;

SIGN(SALARY)
------------
           1
           1
           1
           1
           1
           1
           1
           1
           1
           1

10 rows selected.

SQL> SELECT TRUNC(SALARY) FROM EMPLOYEE_20BAI1154;'
  2
SQL> SELECT TRUNC(SALARY) FROM EMPLOYEE_20BAI1154;

TRUNC(SALARY)
-------------
        20000
        15000
        10000
         8000
        11000
         3000
         2000
         6000
         7000
        11000

10 rows selected.

SQL> SELECT ROUND(SALARY) FROM EMPLOYEE_20BAI1154;

ROUND(SALARY)
-------------
        20000
        15000
        10000
         8000
        11000
         3000
         2000
         6000
         7000
```

3. Extract only the first 5 characters of the employee names.

```
SQL> SELECT SUBSTR(EMPNAME,1,5) AS FIRST_FIVE_CHARACTERS FROM EMPLOYEE_20BAI1154;

FIRST_FIVE_CHARACTER
--------------------
RICK
CHARL
MARGE
MARTY
VICTO
TYRIO
JAMIE
EVA
ANDRE
XAVIE

10 rows selected.

SQL>
```

4. Apply any other five string built in function to ‘name’ attribute of employee table.

```
SQL> SELECT LENGTH(EMPNAME) FROM EMPLOYEE_20BAI1154;

LENGTH(EMPNAME)
---------------
              4
              9
              8
              5
              8
              6
              5
              3
              6
              6

10 rows selected.

SQL> SELECT LOWER(EMPNAME) FROM EMPLOYEE_20BAI1154;

LOWER(EMPNAME)
------------------------------
rick
charlotte
margeary
marty
victoria
tyrion
jamie
eva
andrea
xavier

10 rows selected.

SQL> SELECT INSTR(EMPNAME,'A',1) FROM EMPLOYEE_20BAI1154;

INSTR(EMPNAME,'A',1)
--------------------
                   0
                   3
                   2
                   2
                   8
                   0
                   2
                   3
                   1
                   2
```

```
SQL> SELECT INITCAP(EMPNAME) FROM EMPLOYEE_20BAI1154;

INITCAP(EMPNAME)
--------------------------------
Rick
Charlotte
Margeary
Marty
Victoria
Tyrion
Jamie
Eva
Andrea
Xavier

10 rows selected.
```

```
SQL> SELECT REPLACE(EMPNAME,EMPNAME,'REDACTED') FROM EMPLOYEE_20BAI1154;

REPLACE(EMPNAME,EMPNAME,'REDACTED')
--------------------------------------------------------------------------------
REDACTED
REDACTED
REDACTED
REDACTED
REDACTED
REDACTED
REDACTED
REDACTED
REDACTED
REDACTED

10 rows selected.

SQL>
```

5. Determine the max and min salary and rename the column as max_salary and min_salary.

```
SQL> SELECT MAX(SALARY) AS MAX_SALARY FROM EMPLOYEE_20BAI1154;

MAX_SALARY
----------
     20000

SQL> SELECT MIN(SALARY) AS MIN_SALARY FROM EMPLOYEE_20BAI1154;

MIN_SALARY
----------
      2000

SQL>
```

6 Display the month name of date “14-jul-15” in full.

```
SQL> SELECT MONTHNAME('14-JUL-15');
```

7. Display the Dob of all employees in the format “dd-mm-yy”.

```
SQL> SELECT TO_CHAR(DOB,'dd-mm-yy') FROM EMPLOYEE_20BAI1154;

TO_CHAR(
--------
12-08-01
11-04-02
26-10-02
17-08-01
16-04-01
05-10-15
14-07-15
27-04-02
11-08-01
03-10-01

10 rows selected.
```

8. Display the date two months after the Dob of employees.

```
SQL> SELECT ADD_MONTHS(DOB,2) FROM EMPLOYEE_20BAI1154;

ADD_MONTH
---------
12-OCT-01
11-JUN-02
26-DEC-02
17-OCT-01
16-JUN-01
05-DEC-15
14-SEP-15
27-JUN-02
11-OCT-01
03-DEC-01

10 rows selected.
```

9. Display the last date of that month in “05-Oct-15”.

```
SQL> SELECT LAST_DAY('05-OCT-15') FROM DUAL;

LAST_DAY(
---------
31-OCT-15

SQL>
```

10. Display the rounded date in the year format, month format, day format

```
SQL> SELECT TO_CHAR(DOB,'yy-mm-dd') FROM EMPLOYEE_20BAI1154;

TO_CHAR(
--------
01-08-12
02-04-11
02-10-26
01-08-17
01-04-16
15-10-05
15-07-14
02-04-27
01-08-11
01-10-03

10 rows selected.

SQL>
```

11. Display the date 60 days before current date.

```
SQL> SELECT (DOB-60) PREVDATE FROM EMPLOYEE_20BAI1154;

PREVDATE
---------
13-JUN-01
10-FEB-02
27-AUG-02
18-JUN-01
15-FEB-01
06-AUG-15
15-MAY-15
26-FEB-02
12-JUN-01
04-AUG-01

10 rows selected.

SQL>
```

12. Display the names and dob of all employees who were born in August.

```
SQL> SELECT EMPNAME,DOB AS DATE_OF_BIRTH FROM EMPLOYEE_20BAI1154 WHERE TO_CHAR(DOB,'MON')='AUG';

EMPNAME                        DATE_OF_B
------------------------------ ---------
RICK                           12-AUG-01
MARTY                          17-AUG-01
ANDREA                         11-AUG-01

SQL>
```

13. List out the employee names who will celebrate their birthdays during current month.

```
SQL> SELECT EMPNAME FROM EMPLOYEE_20BAI1154 WHERE TO_CHAR(DOB,'MON')='APR';

EMPNAME
------------------------------
CHARLOTTE
VICTORIA
EVA

SQL>
```

14. List all female employees who were born April.

```
SQL> SELECT EMPNAME FROM EMPLOYEE_20BAI1154 WHERE GENDER='FEMALE' AND TO_CHAR(DOB,'MON')='APR';

EMPNAME
----------
CHARLOTTE
VICTORIA
EVA

SQL>
```

15.What is the difference between maximum and minimum salaries of employees in the organization?

```
SQL> SELECT (MAX(SALARY)-MIN(SALARY)) AS DIFFERENCE FROM EMPLOYEE_20BAI1154;

DIFFERENCE
----------
     18000

SQL>
```

16. Display number of employees working in each department and their department name.

```
SQL> SELECT JOB,COUNT(JOB) AS NUMBER_OF_EMP FROM EMPLOYEE_20BAI1154 GROUP BY JOB;

JOB                          NUMBER_OF_EMP
---------- ----------
SUPERVISOR                            1
SECRETARY                             1
ASSISTANT MANAGER                     1
RECEPTIONIST                          1
JANITOR                               2
HANDLER OF OPERATIONS                 1
MANAGER                               1
HR MANAGER                            1
SALES EXECUTIVE                       1

9 rows selected.

SQL>
```

17. Display total salary spent for employees.

```
SQL> SELECT SUM(SALARY) AS TOTAL_SALARY FROM EMPLOYEE_20BAI1154;

TOTAL_SALARY
------------
       93000

SQL>
```

18. Display total salary spent for each job category.

```
SQL> SELECT JOB,SUM(SALARY) FROM EMPLOYEE_20BAI1154 GROUP BY JOB;

JOB                          SUM(SALARY)
---------------------------- -----------
SUPERVISOR                         15000
SECRETARY                           7000
ASSISTANT MANAGER                  10000
RECEPTIONIST                        6000
JANITOR                             5000
HANDLER OF OPERATIONS              11000
MANAGER                            20000
HR MANAGER                         11000
SALES EXECUTIVE                     8000

9 rows selected.

SQL>
```

19. Display lowest paid employee details under each manager.

```
SQL> SELECT * FROM EMPLOYEE_20BAI1154 WHERE JOB!='MANAGER';

     EMPID EMPNAME                        JOB
---------- ------------------------------ ------------------------------
DOB           SALARY     DEPTNO GENDER
--------- ---------- ---------- ------------------------------
         2 CHARLOTTE                      SUPERVISOR
11-APR-02      15000        101 FEMALE

         3 MARGEARY                       ASSISTANT MANAGER
26-OCT-02      10000        102 FEMALE

         4 MARTY                          SALES EXECUTIVE
17-AUG-01       8000        103 MALE


     EMPID EMPNAME                        JOB
---------- ------------------------------ ------------------------------
DOB           SALARY     DEPTNO GENDER
--------- ---------- ---------- ------------------------------
         5 VICTORIA                       HR MANAGER
16-APR-01      11000        104 FEMALE

         6 TYRION                         JANITOR
05-OCT-15       3000        105 MALE

         7 JAMIE                          JANITOR
14-JUL-15       2000        106 MALE


     EMPID EMPNAME                        JOB
---------- ------------------------------ ------------------------------
DOB           SALARY     DEPTNO GENDER
--------- ---------- ---------- ------------------------------
         8 EVA                            RECEPTIONIST
27-APR-02       6000        107 FEMALE

         9 ANDREA                         SECRETARY
11-AUG-01       7000        108 FEMALE

        10 XAVIER                         HANDLER OF OPERATIONS
03-OCT-01      11000        109 MALE


9 rows selected.
```

20. Find how many job titles are available in employee table.

```
SQL> SELECT COUNT(DISTINCT JOB) AS NO_OF_JOBS FROM EMPLOYEE_20BAI1154;

NO_OF_JOBS
----------
         9

SQL>
```