Practial - 4

Aim: To study Single_row function.

Emp_no	fname	lname	job	mgr	Hire_date	Emp_sal	Emp_comm	Dept_no
7369	Smith	jhonson	clerk	7902	17-sep-1980	800	NULL	20
7499	allen	smith	salesman	7698	20-feb-1981	1600	NULL	30
7521	ward	darton	Salesman	7698	22-feb-1981	1250	500	30
7566	jones	clarion	Manager	7839	2-apr-1981	2975	NULL	20
7654	martin	mike	salesman	7698	28-sep-1981	1250	1400	30
7698	blake	vanes	manager	7839	1-may-1981	2850	NULL	30
7782	clark	rhodes	manager	7839	9-jun-1981	2450	NULL	10
7788	scott	lincon	analyst	7566	9-dec-1982	3000	NULL	20
7839	king	kong	president	NULL	17-nov-1981	5000	NULL	10
7844	turner	giant	salesman	7698	8-sep-1981	1500	0	30
7876	adams	garry	clerk	7788	12-jan-1983	1100	NULL	20
7900	james	bond	clerk	7698	3-dec-1981	950	NULL	30
7902	ford	taylor	analyst	7566	3-dec-1981	3000	NULL	20
7934	miller	wilkinson	clerk	7782	23-jan-1982	1300	NULL	10

```
CREATE TABLE EMPLOYEE_09(emp_no NUMBER(6),Fname VARCHAR2(30),lname
VARCHAR2(30),job VARCHAR2(30),mgr NUMBER(8),hire_date DATE,emp_sal
NUMBER(8,2),emp_comm NUMBER(6,1),dept_no NUMBER(3));

INSERT INTO EMPLOYEE_09 VALUES(7369,'Smith','jhonson','clerk',7902,'17-sep-1980',800,NULL,20);

INSERT INTO EMPLOYEE_09 VALUES(7499,'allen','smith','salesman',7698,'20-feb-1981',1600,NULL,30);

INSERT INTO EMPLOYEE_09 VALUES(7521,'ward','darton','salesman',7698,'22-feb-1981',1250,500,30);

INSERT INTO EMPLOYEE_09 VALUES(7566,'jones','clarion','manager',7839,'2-apr-1981',2975,NULL,20);

INSERT INTO EMPLOYEE_09 VALUES(7654,'martin','mike','salesman',7698,'28-sep-1981',1250,1400,30);

INSERT INTO EMPLOYEE_09 VALUES(7698,'blake','vanes','manager',7839,'1-may-1981',2850,NULL,30);

INSERT INTO EMPLOYEE_09 VALUES(7782,'clark','rhodes','manager',7839,'9-jun-1981',2450,NULL,10);

INSERT INTO EMPLOYEE_09 VALUES(7788,'scott','lincon','analyst',7566,'9-dec-1982',3000,NULL,20);

INSERT INTO EMPLOYEE_09 VALUES(7839,'king','kong','president',NULL,'17-nov-1981',5000,NULL,10);

INSERT INTO EMPLOYEE_09 VALUES(7844,'turner','giant','salesman',7698,'8-sep-1981',1500,0,30);
```

```
INSERT INTO EMPLOYEE_09 VALUES(7876,'adams','garry','clerk',7788,'12-jan-1983',1100,NULL,20);

INSERT INTO EMPLOYEE_09 VALUES(7900,'james','bond','clerk',7698,'3-dec-1981',950,NULL,30);

INSERT INTO EMPLOYEE_09 VALUES(7902,'ford','taylor','analyst',7566,'3-dec-1981',3000,NULL,20);

INSERT INTO EMPLOYEE_09 VALUES(7934,'miller','wilkinson','clerk',7782,'23-jan-1982',1300,NULL,10);
```

```
Table dropped.

SQL> @ D:\DBMS\EMPLOYEE_09.sql
Table created.

1 row created.

1 row created.

1 row created.

1 row created.

1 row created.

1 row created.

1 row created.

1 row created.

1 row created.

1 row created.

1 row created.

1 row created.

1 row created.

1 row created.

1 row created.

SQL>
```

Queries:

1. Write a query to display the current date. Label the column Date.

```
SQL> select sysdate "Date" from dual;

Date
---------
23-AUG-21

SQL>
```

2. For each employee, display the employee number, job, salary, and salary increase by 15% and expressed as a whole number. Label the column New Salary.

```
SQL> SELECT EMP_NO,EMP_SAL,ROUND((EMP_SAL*0.15)+EMP_SAL) "NEW SALARY" FROM EMPLO
YEE_09;

    EMP_NO    EMP_SAL NEW SALARY
---------- ---------- ----------
      7369        800        920
      7499       1600       1840
      7521       1250       1438
      7566       2975       3421
      7654       1250       1438
      7698       2850       3278
      7782       2450       2818
      7788       3000       3450
      7839       5000       5750
      7844       1500       1725
      7876       1100       1265
      7900        950       1093
      7902       3000       3450
      7934       1300       1495

14 rows selected.
```

3. Modify your query no 4.(2) to add a column that subtracts the old salary from the new salary. Label the column Increase.

```
SQL>   SELECT EMP_NO,EMP_SAL,ROUND(EMP_SAL*0.15) "INCREASED" FROM EMPLOYEE_09;

    EMP_NO    EMP_SAL  INCREASED
---------- ---------- ----------
      7369        800        120
      7499       1600        240
      7521       1250        188
      7566       2975        446
      7654       1250        188
      7698       2850        428
      7782       2450        368
      7788       3000        450
      7839       5000        750
      7844       1500        225
      7876       1100        165
      7900        950        143
      7902       3000        450
      7934       1300        195

14 rows selected.
```

4. Write a query that displays the employee's names with the first letter capitalized and all other letters lowercase, and the length of the names, for all employees whose name starts with J, A, or M. Give each column an appropriate label. Sort the results by the employee's last names.

```
SQL> SELECT INITCAP(F_NAME) "NAME" ,LENGTH(F_NAME) "LENGHT" FROM EMPLOYEE_09 WHE
RE F_NAME LIKE 'J%' OR F_NAME LIKE 'M%' OR F_NAME LIKE 'A%' ORDER BY F_NAME;

NAME                 LENGHT
-------------------- ----------
Adams                     5
Allen                     5
James                     5
Jones                     5
Martin                    6
Miller                    6

6 rows selected.
```

5. Write a query that produces the following for each employee: <employee last name> earns <salary>monthly

```
SQL> SELECT L_NAME ||' Earns '||EMP_SAL||' Monthly ' FROM EMPLOYEE_09;

L_NAME||'EARNS'||EMP_SAL||'MONTHLY'
--------------------------------------------------------------------------------
Jhonson Earns 800 Monthly
Smith Earns 1600 Monthly
Dartom Earns 1250 Monthly
Clarion Earns 2975 Monthly
Mike Earns 1250 Monthly
Vanes Earns 2850 Monthly
Rhodes Earns 2450 Monthly
Lincon Earns 3000 Monthly
Kong Earns 5000 Monthly
Giant Earns 1500 Monthly
Garry Earns 1100 Monthly
Bond Earns 950 Monthly
Taylor Earns 3000 Monthly
Wilkinson Earns 1300 Monthly

14 rows selected.
```

6. Display the name, hire date, number of months employed and day of the week on which the employee has started. Order the results by the day of the week starting with Monday.

```
SQL> SELECT F_NAME,HIRE_DATE,MONTHS_BETWEEN(SYSDATE,HIRE_DATE), TO_CHAR(HIRE_DAT
E,'DAY') FROM EMPLOYEE_09 ORDER BY TO_CHAR(HIRE_DATE,'D');

F_NAME          HIRE_DATE MONTHS_BETWEEN(SYSDATE,HIRE_DATE)
--------------- --------- -----------------------------------
TO_CHAR(HIRE_DATE,'DAY')
-------------------------------------
Ward            22-FEB-81                         486.537741
SUNDAY

Martin          28-SEP-81                         479.344193
MONDAY

Clark           09-JUN-81                         482.957096
TUESDAY

Turner          08-SEP-81                         479.989354
TUESDAY

King            17-NOV-81                         477.699032
TUESDAY

Adams           12-JAN-83                         463.860322
WEDNESDAY

Smith           17-SEP-80                         491.699032
WEDNESDAY

Jones           02-APR-81                         485.182902
THURSDAY

Scott           09-DEC-82                         464.957096
THURSDAY

James           03-DEC-81                         477.150644
THURSDAY

Blake           01-MAY-81                         484.215161
FRIDAY

Allen           20-FEB-81                         486.602257
FRIDAY

Miller          23-JAN-82                         475.505483
SATURDAY

Ford            03-JAN-81                         488.150644
SATURDAY


14 rows selected.
```

7. Display the hiredate of emp in a format that appears as Seventh of June 1994 12:00:00 AM.

```
SQL> SELECT TO_CHAR(HIRE_DATE,'DDSPTH "OF" MONTH YYYY HH:MM:SS AM') FROM EMPLOYE
E_09;

TO_CHAR(HIRE_DATE,'DDSPTH"OF"MONTHYYYYHH:MM:SSAM')
--------------------------------------------------------------------------------
SEVENTEENTH OF SEPTEMBER 1980 12:09:00 AM
TWENTIETH OF FEBRUARY  1981 12:02:00 AM
TWENTY-SECOND OF FEBRUARY  1981 12:02:00 AM
SECOND OF APRIL     1981 12:04:00 AM
TWENTY-EIGHTH OF SEPTEMBER 1981 12:09:00 AM
FIRST OF MAY        1981 12:05:00 AM
NINTH OF JUNE       1981 12:06:00 AM
NINTH OF DECEMBER  1982 12:12:00 AM
SEVENTEENTH OF NOVEMBER  1981 12:11:00 AM
EIGHTH OF SEPTEMBER 1981 12:09:00 AM
TWELFTH OF JANUARY   1983 12:01:00 AM
THIRD OF DECEMBER  1981 12:12:00 AM
THIRD OF JANUARY   1981 12:01:00 AM
TWENTY-THIRD OF JANUARY   1982 12:01:00 AM

14 rows selected.
```

8. Write a query to calculate the annual compensation of all employees (sal+comm.).

```
SQL> SELECT (EMP_SAL + EMP_COMM) "ANNUAL COMPENSATION" FROM EMPLOYEE_09;
ANNUAL COMPENSATION
-------------------

              1750
              2650



14 rows selected.
```