WORKSHEET-II (USING EMP TABLE)

1) List employee names and their hire dates sorted in the order of their experience.

2) List managers names and their joining dates completely   spelled in alphabetical order of names.

3) List employee names and their experience in years with names arranged in descending order.

4) List employee names having a minimum of 2 years' experience sorted on experience.

5) List employee names with all capital letters, with all small letters and with first letter only as capital.

6) List employee names with length of the name sorted on length.

7) List employee names appending Sri to the beginning and Garu to the end.

8) List employee names and month names of joining.

9) List employee names and year of joining in words.

10) List employees names, job and salary with 5 hyphens in between.

11) List employee names and position of first occurrence of I in their name.

12) List employee names and the string without first character and last character in their name.

13) List employees who joined between Apr 81 and Apr 82.

14) List max sal, min sal and average sal of depts. 10,30.

15) List the designation in dept 30 but not in 20.

16) List the number of employees ine ach department along with dept numbers.

17) List number of employees joined year wise.

18) List number of employees job wise.

19) List max sal, min sal, average salary dept wise.

20) List max sal, min sal, average salary job wise.

21) List max sal, min sal for the jobs MANAGER and CLERK.

22) List max sal, min sal   AND average salary of the depts. Having a minimum 3 employees.

23) List the number of employees in each job in each department.

24) List MGR and the number of employees report to them in the sorted order.

25) List   emp numbers of employees to whom a minimum of 3 people report.

26) List dept numbers having a minimum of 3 persons.

27) List names of jobs having a minimum of 3 persons in that job.

28) List names of months in which a minimum of 3 persons joined.

29) List hiredates of employees having 2 or more employees having the same hiredate.

30) List departments having minimum of 3 people having a minimum of 17 years of experience.

WORKSHEET-2

1) List employee names and their hire dates sorted in the order of their experience.

```
SQL> select ename,round((months_between(sysdate,hiredate))/12) as
experience from emp order by experience;

ENAME      EXPERIENCE
---------- ----------
SCOTT              37
ADAMS              37
KING               38
MARTIN             38
JAMES              38
FORD               38
TURNER             38
MILLER             38
BLAKE              39
SMITH              39
WARD               39

ENAME      EXPERIENCE
---------- ----------
ALLEN              39
CLARK              39
JONES              39

14 rows selected.
```

2) List managers names and their joining dates completely spelled in alphabetical order of names.

```
SQL> select ename,hiredate from emp where job='MANAGER' order by ename;

ENAME      HIREDATE
---------- ---------
BLAKE      01-MAY-81
CLARK      09-JUN-81
JONES      02-APR-81
```

3) List employee names and their experience in years with names arranged in descending order.

```
SQL> select ename,round((months_between(sysdate,hiredate))/12) as
experience from emp order by ename desc;

ENAME      EXPERIENCE
---------- ----------
WARD               39
TURNER             38
SMITH              39
SCOTT              37
MILLER             38
MARTIN             38
KING               38
```

```
JONES              39
JAMES              38
FORD               38
CLARK              39

ENAME      EXPERIENCE
---------- ----------
BLAKE              39
ALLEN              39
ADAMS              37

14 rows selected.
```

4) List employee names having a minimum of 2 years experience sorted on experience.

```
SQL> select ename,round((months_between(sysdate,hiredate))/12) as
experience from emp where round((m
onths_between(sysdate,hiredate))/12)>=2 order by
round((months_between(sysdate,hiredate))/12);

ENAME      EXPERIENCE
---------- ----------
SCOTT              37
ADAMS              37
KING               38
MARTIN             38
JAMES              38
FORD               38
TURNER             38
MILLER             38
BLAKE              39
SMITH              39
WARD               39

ENAME      EXPERIENCE
---------- ----------
ALLEN              39
CLARK              39
JONES              39

14 rows selected.
```

5) List employee names with all capital letters, with all small letters and with first letter only as capital.

```
SQL> select upper(ename),lower(ename),initcap(ename) from emp;

UPPER(ENAM LOWER(ENAM INITCAP(EN
---------- ---------- ----------
KING       king       King
BLAKE      blake      Blake
CLARK      clark      Clark
JONES      jones      Jones
MARTIN     martin     Martin
ALLEN      allen      Allen
TURNER     turner     Turner
```

```
JAMES        james        James
WARD         ward         Ward
FORD         ford         Ford
SMITH        smith        Smith

UPPER(ENAM LOWER(ENAM INITCAP(EN
---------- ---------- ----------
SCOTT        scott        Scott
ADAMS        adams        Adams
MILLER       miller       Miller

14 rows selected.
```

6) List employee names with length of the name sorted on length.

```
SQL> select ename,length(ename) from emp order by length(ename);

ENAME      LENGTH(ENAME)
---------- -------------
KING                   4
WARD                   4
FORD                   4
BLAKE                  5
CLARK                  5
ALLEN                  5
SCOTT                  5
ADAMS                  5
SMITH                  5
JAMES                  5
JONES                  5

ENAME      LENGTH(ENAME)
---------- -------------
MARTIN                 6
TURNER                 6
MILLER                 6

14 rows selected.
```

7) List employee names appending Sri to the beginning and Garu to the end.

```
SQL> select 'SRI'||' '||ename||' '||'GARU' from emp;

'SRI'||''||ENAME||'
-------------------
SRI KING GARU
SRI BLAKE GARU
SRI CLARK GARU
SRI JONES GARU
SRI MARTIN GARU
SRI ALLEN GARU
SRI TURNER GARU
SRI JAMES GARU
SRI WARD GARU
SRI FORD GARU
SRI SMITH GARU
```

```
'SRI'||''||ENAME||'
-------------------
SRI SCOTT GARU
SRI ADAMS GARU
SRI MILLER GARU

14 rows selected.
```

8) List employee names and month names of joining.

```
SQL> select ename,to_char(hiredate,'MONTH') from emp;

ENAME      TO_CHAR(H
---------- ---------
KING       NOVEMBER
BLAKE      MAY
CLARK      JUNE
JONES      APRIL
MARTIN     SEPTEMBER
ALLEN      FEBRUARY
TURNER     SEPTEMBER
JAMES      DECEMBER
WARD       FEBRUARY
FORD       DECEMBER
SMITH      DECEMBER

ENAME      TO_CHAR(H
---------- ---------
SCOTT      DECEMBER
ADAMS      JANUARY
MILLER     JANUARY

14 rows selected.
```

9) List employee names and year of joining in words.

```
SQL> select ename,to_char(hiredate,'YEAR') from emp;

ENAME      TO_CHAR(HIREDATE,'YEAR')
---------- -------------------------------------------
KING       NINETEEN EIGHTY-ONE
BLAKE      NINETEEN EIGHTY-ONE
CLARK      NINETEEN EIGHTY-ONE
JONES      NINETEEN EIGHTY-ONE
MARTIN     NINETEEN EIGHTY-ONE
ALLEN      NINETEEN EIGHTY-ONE
TURNER     NINETEEN EIGHTY-ONE
JAMES      NINETEEN EIGHTY-ONE
WARD       NINETEEN EIGHTY-ONE
FORD       NINETEEN EIGHTY-ONE
SMITH      NINETEEN EIGHTY

ENAME      TO_CHAR(HIREDATE,'YEAR')
---------- -------------------------------------------
SCOTT      NINETEEN EIGHTY-TWO
```

```
ADAMS        NINETEEN EIGHTY-THREE
MILLER       NINETEEN EIGHTY-TWO

14 rows selected.
```

10) List employees names, job and salary with 5 hyphens in between.

```
SQL> select ename||'_ _ _ _ _'||job||'_ _ _ _ _'||sal from emp;

ENAME||'_____'||JOB||'_____'||SAL
----------------------------------------------------------------
---------
KING_ _ _ _ _PRESIDENT_ _ _ _ _5000
BLAKE_ _ _ _ _MANAGER_ _ _ _ _2850
CLARK_ _ _ _ _MANAGER_ _ _ _ _2450
JONES_ _ _ _ _MANAGER_ _ _ _ _2975
MARTIN_ _ _ _ _SALESMAN_ _ _ _ _1250
ALLEN_ _ _ _ _SALESMAN_ _ _ _ _1600
TURNER_ _ _ _ _SALESMAN_ _ _ _ _1500
JAMES_ _ _ _ _CLERK_ _ _ _ _950
WARD_ _ _ _ _SALESMAN_ _ _ _ _1250
FORD_ _ _ _ _ANALYST_ _ _ _ _3000
SMITH_ _ _ _ _CLERK_ _ _ _ _800

ENAME||'_____'||JOB||'_____'||SAL
----------------------------------------------------------------
---------
SCOTT_ _ _ _ _ANALYST_ _ _ _ _3000
ADAMS_ _ _ _ _CLERK_ _ _ _ _1100
MILLER_ _ _ _ _CLERK_ _ _ _ _1300

14 rows selected.
```

11) List employee names and position of first occurrence of I in their name.

```
SQL> select ename,instr(ename,'I') from emp;

ENAME        INSTR(ENAME,'I')
---------- ----------------
KING                      2
BLAKE                     0
CLARK                     0
JONES                     0
MARTIN                    5
ALLEN                     0
TURNER                    0
JAMES                     0
WARD                      0
FORD                      0
SMITH                     3

ENAME        INSTR(ENAME,'I')
---------- ----------------
SCOTT                     0
ADAMS                     0
```

```
MILLER                    2

14 rows selected.
```

12) List employee names and the string without first character and last character in their name.

```
SQL> select ename,substr(ename,2,length(ename)-2) from emp;

ENAME      SUBSTR(EN
---------- ---------
KING       IN
BLAKE      LAK
CLARK      LAR
JONES      ONE
MARTIN     ARTI
ALLEN      LLE
TURNER     URNE
JAMES      AME
WARD       AR
FORD       OR
SMITH      MIT

ENAME      SUBSTR(EN
---------- ---------
SCOTT      COT
ADAMS      DAM
MILLER     ILLE

14 rows selected.
```

13) List employees who joined between Apr 81 and Apr 82.

```
SQL> select ename,hiredate from emp where hiredate between '01-APR-81'
and '30-APR-82';

ENAME      HIREDATE
---------- ---------
KING       17-NOV-81
BLAKE      01-MAY-81
CLARK      09-JUN-81
JONES      02-APR-81
MARTIN     28-SEP-81
TURNER     08-SEP-81
JAMES      03-DEC-81
FORD       03-DEC-81
MILLER     23-JAN-82

9 rows selected.
```

14) List max sal, min sal and average sal of depts. 10,30.

```
SQL> select min(sal),max(sal),avg(sal) from emp where deptno in(10,30)
group by deptno;

  MIN(SAL)   MAX(SAL)   AVG(SAL)
```

```
---------- ---------- ----------
      1300       5000 2916.66667
       950       2850 1566.66667
```

15) List the designation in dept 30 but not in 20.

```
SQL> select job from emp where deptno=30 minus
  2  select job from emp where deptno=20;

JOB
---------
SALESMAN
```

16) List the number of employees in each department along with dept numbers.

```
SQL> select deptno,count(*) from emp group by deptno;

    DEPTNO   COUNT(*)
---------- ----------
        10          3
        20          5
        30          6
```

17) List number of employees joined year wise.

```
SQL> select count(*),to_char(hiredate,'YY') as year from emp group by
to_char(hiredate,'YY');

  COUNT(*) YE
---------- --
         1 80
        10 81
         2 82
         1 83
```

18) List number of employees job wise.

```
SQL> select job,count(*) from emp group by job;

JOB         COUNT(*)
--------- ----------
ANALYST            2
CLERK              4
MANAGER            3
PRESIDENT          1
SALESMAN           4
```

19) List max sal, min sal, average salary dept wise.

```
SQL> select max(sal),min(sal),avg(sal),deptno from emp group by deptno;

  MAX(SAL)   MIN(SAL)   AVG(SAL)     DEPTNO
---------- ---------- ---------- ----------
      5000       1300 2916.66667         10
      3000        800       2175         20
```

```
          2850           950 1566.66667          30
```

20) List max sal, min sal, average salary job wise.

```
SQL> select max(sal),min(sal),avg(sal),job from emp group by job;

  MAX(SAL)    MIN(SAL)    AVG(SAL) JOB
---------- ---------- ---------- ---------
      3000        3000        3000 ANALYST
      1300         800      1037.5 CLERK
      2975        2450 2758.33333 MANAGER
      5000        5000        5000 PRESIDENT
      1600        1250        1400 SALESMAN
```

21) List max sal, min sal for the jobs MANAGER and CLERK.

```
SQL> select max(sal),min(sal),job from emp where job
in('MANAGER','CLERK') group by job;

  MAX(SAL)    MIN(SAL) JOB
---------- ---------- ---------
      1300         800 CLERK
      2975        2450 MANAGER
```

22) List max sal, min sal AND average salary of the depts. Having a minimum 3 employees.

```
SQL> select max(sal),min(sal),avg(sal) from emp group by deptno having
count(*)>=3;

  MAX(SAL)    MIN(SAL)    AVG(SAL)
---------- ---------- ----------
      5000        1300 2916.66667
      3000         800        2175
      2850         950 1566.66667
```

23) List the number of employees in each job in each department.

```
SQL> select count(*),job,deptno from emp group by deptno,job;

  COUNT(*) JOB           DEPTNO
---------- --------- ----------
         1 CLERK             10
         1 MANAGER           10
         1 PRESIDENT         10
         2 CLERK             20
         2 ANALYST           20
         1 MANAGER           20
         1 CLERK             30
         1 MANAGER           30
         4 SALESMAN          30

9 rows selected.
```

24) List MGR and the number of employees report to them in the sorted order.

```
SQL> select mgr,count(*) from emp where mgr is not NULL group by mgr order
```

```
by count(*);

       MGR    COUNT(*)
---------- ----------
      7782          1
      7788          1
      7902          1
      7566          2
      7839          3
      7698          5

6 rows selected.
```

25) List emp numbers of employees to whom a minimum of 3 people report.

```
SQL> select mgr,count(*) from emp group by mgr having count(*)>=3;

       MGR    COUNT(*)
---------- ----------
      7698          5
      7839          3
```

26) List dept numbers having a minimum of 3 persons.

```
SQL> select deptno from emp group by deptno having count(*)>=3;

    DEPTNO
----------
        10
        20
        30
```

27) List names of jobs having a minimum of 3 persons in that job.

```
SQL> select job from emp group by job having count(*)>=3;

JOB
---------
CLERK
MANAGER
SALESMAN
```

28) List names of months in which a minimum of 3 persons joined.

```
SQL> select to_char(hiredate,'MONTH') from emp group by
to_char(hiredate,'MONTH') having count(*)>=3;

TO_CHAR(H
---------
DECEMBER
```

29) List hiredates of employees having 2 or more employees having the same hiredate.

```
SQL> select hiredate,count(*) from emp group by hiredate having
count(*)>=2;
```

```
HIREDATE     COUNT(*)
---------  ----------
03-DEC-81          2
```

30) List departments having minimum of 3 people having a minimum of 17 years of experience.

```
SQL> select
deptno,count(*),round((months_between(sysdate,hiredate))/12) from emp
where round((month
s_between(sysdate,hiredate))/12)>=17 group by
deptno,round((months_between(sysdate,hiredate))/12) ha
ving count(*)>=3;

    DEPTNO   COUNT(*) ROUND((MONTHS_BETWEEN(SYSDATE,HIREDATE))/12)
---------- ---------- --------------------------------------------
        30          3                                           38
        30          3                                           39
```