

**MOKSHI AYA**  
**FYCS - 04**

## PRACTICAL NO.3

A) Using emp table, perform the following queries:

1) Display the details of all employees.

```

SQL> Run SQL Command Line
Connected.
SQL> select * from MOKSHI_EMP;

  EMPNO  ENAME      JOB              MRG  HIREDATE          SAL          COMM
-----
DEPTNO
7839 KING        PRESIDENT        17-NOV-81      5000
10
7698 BLACK       MANAGER          7839 01-MAY-81      2850
30
7782 CLARK       MANAGER          7839 09-JAN-81      2450
10

  EMPNO  ENAME      JOB              MRG  HIREDATE          SAL          COMM
-----
DEPTNO
7566 JONES       MANAGER          7839 02-APR-81      2975
20
7788 SCOTT       ANALYST          7566 19-APR-87      3000
20
7902 FORD        ANALYST          7566 03-DEC-81      3000
20

  EMPNO  ENAME      JOB              MRG  HIREDATE          SAL          COMM
-----
DEPTNO
7369 SMITH       CLERK            7902 17-DEC-80        800
20
7499 ALLEN       SALESMAN         7698 20-FEB-81      1600          300
30
7521 WARD        SALESMAN         7698 22-FEB-81      1250          500
30

  EMPNO  ENAME      JOB              MRG  HIREDATE          SAL          COMM
-----
DEPTNO
7654 MARTIN      SALESMAN         7698 28-SEP-81      1250          1400
30
7844 TURNER     SALESMAN         7698 08-SEP-81      1500           0
30
7876 ADAMS       CLERK            7788 23-MAY-87      1100
20

  EMPNO  ENAME      JOB              MRG  HIREDATE          SAL          COMM
-----
DEPTNO
7900 JAMES       CLERK            7698 03-DEC-81        950
30
7934 MILLER     CLERK            7782 23-JAN-82      1300
10

14 rows selected.

```

- 2) Display the name and job for all employees.

```
SQL> Run SQL Command Line

SQL> SELECT ENAME, JOB FROM MOKSHI_EMP;

ENAME          JOB
-----
KING            PRESIDENT
BLACK           MANAGER
CLARK           MANAGER
JONES           MANAGER
SCOTT           ANALYST
FORD            ANALYST
SMITH           CLERK
ALLEN           SALESMAN
WARD            SALESMAN
MARTIN          SALESMAN
TURNER          SALESMAN

ENAME          JOB
-----
ADAMS           CLERK
JAMES           CLERK
MILLER          CLERK

14 rows selected.
```

- 3) Display name and salary for all employees.

```
SQL> Run SQL Command Line

SQL> SELECT ENAME, SAL FROM MOKSHI_EMP;

ENAME          SAL
-----
KING            5000
BLACK           2850
CLARK           2450
JONES           2975
SCOTT           3000
FORD            3000
SMITH           800
ALLEN           1600
WARD            1250
MARTIN          1250
TURNER          1500

ENAME          SAL
-----
ADAMS           1100
JAMES           950
MILLER          1300

14 rows selected.
```

- 4) Display the details of all employees who are earning salary greater than 2000.

Run SQL Command Line

```
SQL> SELECT * FROM MOKSHI_EMP
2  WHERE SAL>2000;
```

EMPNO	ENAME	JOB	MRG	HIREDATE	SAL	COMM
7839	KING	PRESIDENT		17-NOV-81	5000	
7698	BLACK	MANAGER	7839	01-MAY-81	2850	
7782	CLARK	MANAGER	7839	09-JAN-81	2450	
7566	JONES	MANAGER	7839	02-APR-81	2975	
7788	SCOTT	ANALYST	7566	19-APR-87	3000	
7902	FORD	ANALYST	7566	03-DEC-81	3000	

6 rows selected.

- 5) Display the details of all employees who are working as Manager.

Run SQL Command Line

```
SQL> SELECT * FROM MOKSHI_EMP
2  WHERE JOB='MANAGER';
```

EMPNO	ENAME	JOB	MRG	HIREDATE	SAL	COMM
7698	BLACK	MANAGER	7839	01-MAY-81	2850	
7782	CLARK	MANAGER	7839	09-JAN-81	2450	
7566	JONES	MANAGER	7839	02-APR-81	2975	

- 6) Display the names of all employees who are working in department number 10.

```
SQL> SELECT * FROM MOKSHI_EMP
2 WHERE DEPTNO=10;
```

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM
7839	KING	PRESIDENT		17-NOV-81	5000	
7782	CLARK	MANAGER	7839	09-JAN-81	2450	
7934	MILLER	CLERK	7782	23-JAN-82	1300	

- 7) Display the names of all employees working as clerk and drawing a salary more than 3000.

```
SQL> SELECT * FROM MOKSHI_EMP
2 WHERE JOB='CLERK' AND SAL>3000;
```

no rows selected

```
SQL>
```

- 8) Display employee number and names for employees who earn commission.

```
SQL> SELECT EMPNO,ENAME,COMM FROM MOKSHI_EMP
2 WHERE COMM>0;
```

EMPNO	ENAME	COMM
7499	ALLEN	300
7521	WARD	500
7654	MARTIN	1400

- 9) Display names of employees who do not earn any commission.

```
SQL> Run SQL Command Line

SQL> SELECT EMPNO,ENAME,COMM FROM MOKSHI_EMP
2  WHERE COMM IS NULL;

      EMPNO ENAME      COMM
-----
      7839 KING
      7698 BLACK
      7782 CLARK
      7566 JONES
      7788 SCOTT
      7902 FORD
      7369 SMITH
      7876 ADAMS
      7900 JAMES
      7934 MILLER

10 rows selected.
```

- 10) Display the names of employees who are working as clerk, salesman or analyst and drawing a salary more than 2000.

```
SQL> Run SQL Command Line

SQL> SELECT ENAME FROM MOKSHI_EMP
2  WHERE JOB IN('CLERK','SALESMAN','ANALYST')AND SAL>2000;

ENAME
-----
SCOTT
FORD
```

- 11) Display the names of employees who are working as clerk, salesman or analyst.

```
SQL> Run SQL Command Line

SQL> SELECT ENAME FROM MOKSHI_EMP
2  WHERE JOB IN('CLERK','SALESMAN','ANALYST');

ENAME
-----
SCOTT
FORD
SMITH
ALLEN
WARD
MARTIN
TURNER
ADAMS
JAMES
MILLER

10 rows selected.
```

12) Display the names of employees working in department number 10 or 20 or 30.

```
SQL> Run SQL Command Line

SQL> SELECT ENAME FROM MOKSHI_EMP
  2  WHERE DEPTNO IN(10,20,30);

ENAME
-----
KING
BLACK
CLARK
JONES
SCOTT
FORD
SMITH
ALLEN
WARD
MARTIN
TURNER

ENAME
-----
ADAMS
JAMES
MILLER

14 rows selected.
```

13) Display the details of employees whose salary lies in the range of 1000 and 2000.

```

SQL> SELECT * FROM MOKSHI_EMP
2 WHERE SAL BETWEEN 1000 AND 3000;

```

EMPNO	ENAME	JOB	MRG	HIREDATE	SAL	COMM
7698	BLACK	MANAGER	7839	01-MAY-81	2850	
7782	CLARK	MANAGER	7839	09-JAN-81	2450	
7566	JONES	MANAGER	7839	02-APR-81	2975	
7788	SCOTT	ANALYST	7566	19-APR-87	3000	
7902	FORD	ANALYST	7566	03-DEC-81	3000	
7499	ALLEN	SALESMAN	7698	20-FEB-81	1600	300
7521	WARD	SALESMAN	7698	22-FEB-81	1250	500
7654	MARTIN	SALESMAN	7698	28-SEP-81	1250	1400
7844	TURNER	SALESMAN	7698	08-SEP-81	1500	0
7876	ADAMS	CLERK	7788	23-MAY-87	1100	
7934	MILLER	CLERK	7782	23-JAN-82	1300	

11 rows selected.

14) List the employees in the ascending order of their salaries.

Run SQL Command Line						
SQL> SELECT * FROM MOKSHI_EMP						
2 ORDER BY SAL ASC;						
EMPNO	ENAME	JOB	MRG	HIREDATE	SAL	COMM
-----						
DEPTNO						
-----						
7369 20	SMITH	CLERK	7902	17-DEC-80	800	
7900 30	JAMES	CLERK	7698	03-DEC-81	950	
7876 20	ADAMS	CLERK	7788	23-MAY-87	1100	
EMPNO	ENAME	JOB	MRG	HIREDATE	SAL	COMM
-----						
DEPTNO						
-----						
7654 30	MARTIN	SALESMAN	7698	28-SEP-81	1250	1400
7521 30	WARD	SALESMAN	7698	22-FEB-81	1250	500
7934 10	MILLER	CLERK	7782	23-JAN-82	1300	
EMPNO	ENAME	JOB	MRG	HIREDATE	SAL	COMM
-----						
DEPTNO						
-----						
7844 30	TURNER	SALESMAN	7698	08-SEP-81	1500	0
7499 30	ALLEN	SALESMAN	7698	20-FEB-81	1600	300
7782 10	CLARK	MANAGER	7839	09-JAN-81	2450	
EMPNO	ENAME	JOB	MRG	HIREDATE	SAL	COMM
-----						
DEPTNO						
-----						
7698 30	BLACK	MANAGER	7839	01-MAY-81	2850	
7566 20	JONES	MANAGER	7839	02-APR-81	2975	
7902 20	FORD	ANALYST	7566	03-DEC-81	3000	
EMPNO	ENAME	JOB	MRG	HIREDATE	SAL	COMM
-----						
DEPTNO						
-----						
7788 20	SCOTT	ANALYST	7566	19-APR-87	3000	
7839 10	KING	PRESIDENT		17-NOV-81	5000	



15) List the Empno, Ename, Sal of all emps working for Mgr 7369.

```
SQL> SELECT EMPNO,ENAME,SAL FROM MOKSHI_EMP
2 WHERE MRG=7369;

no rows selected

SQL> █
```

16) List the employees who are either 'CLERK' or 'ANALYST' in the Desc order.

```
SQL> SELECT * FROM MOKSHI_EMP
2 WHERE JOB='CLERK' OR JOB='ANALYST'
3 ORDER BY JOB DESC;
```

EMPNO	ENAME	JOB	MRG	HIREDATE	SAL	COMM
7369	SMITH	CLERK	7902	17-DEC-80	800	
7900	JAMES	CLERK	7698	03-DEC-81	950	
7934	MILLER	CLERK	7782	23-JAN-82	1300	
7876	ADAMS	CLERK	7788	23-MAY-87	1100	
7902	FORD	ANALYST	7566	03-DEC-81	3000	
7788	SCOTT	ANALYST	7566	19-APR-87	3000	

```
6 rows selected.
```

17) List the employees who are working in Deptno 10 or 20.

Run SQL Command Line						
SQL> SELECT * FROM MOKSHI_EMP						
2 WHERE DEPTNO IN(10,20);						
EMPNO	ENAME	JOB	MRG	HIREDATE	SAL	COMM
-----						
DEPTNO						
-----						
7839	KING	PRESIDENT		17-NOV-81	5000	
10						
7782	CLARK	MANAGER	7839	09-JAN-81	2450	
10						
7566	JONES	MANAGER	7839	02-APR-81	2975	
20						
-----						
7788	SCOTT	ANALYST	7566	19-APR-87	3000	
20						
7902	FORD	ANALYST	7566	03-DEC-81	3000	
20						
7369	SMITH	CLERK	7902	17-DEC-80	800	
20						
-----						
7876	ADAMS	CLERK	7788	23-MAY-87	1100	
20						
7934	MILLER	CLERK	7782	23-JAN-82	1300	
10						
-----						
8 rows selected.						

18) List the employees whose name have a character set 'll' together.

Run SQL Command Line						
SQL> SELECT * FROM MOKSHI_EMP						
2 WHERE ENAME LIKE '%LL%';						
EMPNO	ENAME	JOB	MRG	HIREDATE	SAL	COMM
-----						
DEPTNO						
-----						
7499	ALLEN	SALESMAN	7698	20-FEB-81	1600	300
30						
7934	MILLER	CLERK	7782	23-JAN-82	1300	
10						

19) List the employees in ascending order of their names.

[illegible]

20) List the employees in descending order of their names.

Run SQL Command Line							
SQL> SELECT * FROM MOKSHI_EMP							
2 ORDER BY ENAME DESC;							
EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	
-----							
DEPTNO							
7521 30	WARD	SALESMAN	7698	22-FEB-81	1250	500	
7844 30	TURNER	SALESMAN	7698	08-SEP-81	1500	0	
7369 20	SMITH	CLERK	7902	17-DEC-80	800		
EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	
-----							
DEPTNO							
7788 20	SCOTT	ANALYST	7566	19-APR-87	3000		
7934 10	MILLER	CLERK	7782	23-JAN-82	1300		
7654 30	MARTIN	SALESMAN	7698	28-SEP-81	1250	1400	
EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	
-----							
DEPTNO							
7839 10	KING	PRESIDENT		17-NOV-81	5000		
7566 20	JONES	MANAGER	7839	02-APR-81	2975		
7900 30	JAMES	CLERK	7698	03-DEC-81	950		
EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	
-----							
DEPTNO							
7902 20	FORD	ANALYST	7566	03-DEC-81	3000		
7782 10	CLARK	MANAGER	7839	09-JAN-81	2450		
7698 30	BLACK	MANAGER	7839	01-MAY-81	2850		
EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	
-----							
DEPTNO							
7499 30	ALLEN	SALESMAN	7698	20-FEB-81	1600	300	
7876 20	ADAMS	CLERK	7788	23-MAY-87	1100		

21) List the employees who do not belong to Deptno 20.

```
SQL> SELECT * FROM MOKSHI_EMP
2 WHERE DEPTNO NOT IN 20;
```

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM
7839	KING	PRESIDENT		17-NOV-81	5000	
7698	BLACK	MANAGER	7839	01-MAY-81	2850	
7782	CLARK	MANAGER	7839	09-JAN-81	2450	
7499	ALLEN	SALESMAN	7698	20-FEB-81	1600	300
7521	WARD	SALESMAN	7698	22-FEB-81	1250	500
7654	MARTIN	SALESMAN	7698	28-SEP-81	1250	1400
7844	TURNER	SALESMAN	7698	08-SEP-81	1500	0
7900	JAMES	CLERK	7698	03-DEC-81	950	
7934	MILLER	CLERK	7782	23-JAN-82	1300	

9 rows selected.

22) List all the employees except PRESIDENT and MANAGER.

```

SQL> SELECT * FROM MOKSHI_EMP
  2  WHERE JOB NOT IN('PRESIDENT','MANAGER');

```

EMPNO	ENAME	JOB	MRG	HIREDATE	SAL	COMM
7788	SCOTT	ANALYST	7566	19-APR-87	3000	
7902	FORD	ANALYST	7566	03-DEC-81	3000	
7369	SMITH	CLERK	7902	17-DEC-80	800	
7499	ALLEN	SALESMAN	7698	20-FEB-81	1600	300
7521	WARD	SALESMAN	7698	22-FEB-81	1250	500
7654	MARTIN	SALESMAN	7698	28-SEP-81	1250	1400
7844	TURNER	SALESMAN	7698	08-SEP-81	1500	0
7876	ADAMS	CLERK	7788	23-MAY-87	1100	
7900	JAMES	CLERK	7698	03-DEC-81	950	
7934	MILLER	CLERK	7782	23-JAN-82	1300	

10 rows selected.

23) List the employees whose name starts with A.

Run SQL Command Line

```
SQL> SELECT * FROM MOKSHI_EMP
2 WHERE ENAME LIKE 'A%';
```

EMPNO	ENAME	JOB	MRG	HIREDATE	SAL	COMM
7499	ALLEN	SALESMAN	7698	20-FEB-81	1600	300
7876	ADAMS	CLERK	7788	23-MAY-87	1100	

24) List all the Clerks of Deptno 20.

Run SQL Command Line

```
SQL> SELECT * FROM MOKSHI_EMP
2 WHERE JOB='CLERK' AND DEPTNO=20;
```

EMPNO	ENAME	JOB	MRG	HIREDATE	SAL	COMM
7369	SMITH	CLERK	7902	17-DEC-80	800	
7876	ADAMS	CLERK	7788	23-MAY-87	1100	

25) List the employees whose names ends with S.

Run SQL Command Line

```
SQL> SELECT * FROM MOKSHI_EMP
2 WHERE ENAME LIKE '%S';
```

EMPNO	ENAME	JOB	MRG	HIREDATE	SAL
7566	JONES	MANAGER	7839	02-APR-1981 12:00AM	2975
7876	ADAMS	CLERK	7788	23-MAY-1987 12:00AM	1100
7900	JAMES	CLERK	7698	03-DEC-1981 12:00AM	950

26) List the employees who has name of exactly 4 characters.

Run SQL Command Line

```
SQL> SELECT * FROM MOKSHI_EMP
2 WHERE ENAME LIKE '____';
```

EMPNO	ENAME	JOB	MRG	HIREDATE	SAL
7839	KING	PRESIDENT		17-NOV-1981 12:00AM	5000
7902	FORD	ANALYST	7566	03-DEC-1981 12:00AM	3000
7521	WARD	SALESMAN	7698	22-FEB-1981 12:00AM	1250

27) List the names of the employees who are working as MANAGER in department 10.

Run SQL Command Line

```
SQL> SELECT * FROM MOKSHI_EMP
2 WHERE JOB='MANAGER' AND DEPTNO=10;
```

EMPNO	ENAME	JOB	MRG	HIREDATE	SAL
7782	CLARK	MANAGER	7839	09-JAN-1981 12:00AM	2450

28) List the total salary of employees working as ANALYST.

Run SQL Command Line

```
SQL> SELECT SUM(SAL)
2 FROM MOKSHI_EMP
3 WHERE JOB='ANALYST';
```

SUM(SAL)
6000

29) List the minimum, maximum and average salary of the employees.

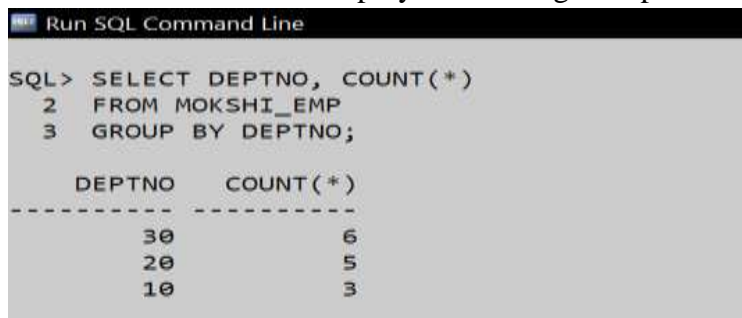
Run SQL Command Line

```
SQL> SELECT MIN(SAL),MAX(SAL),AVG(SAL) FROM MOKSHI_EMP;
```

MIN(SAL)	MAX(SAL)	AVG(SAL)
800	5000	2073.21429



30) List the total number of employees working in department 10.

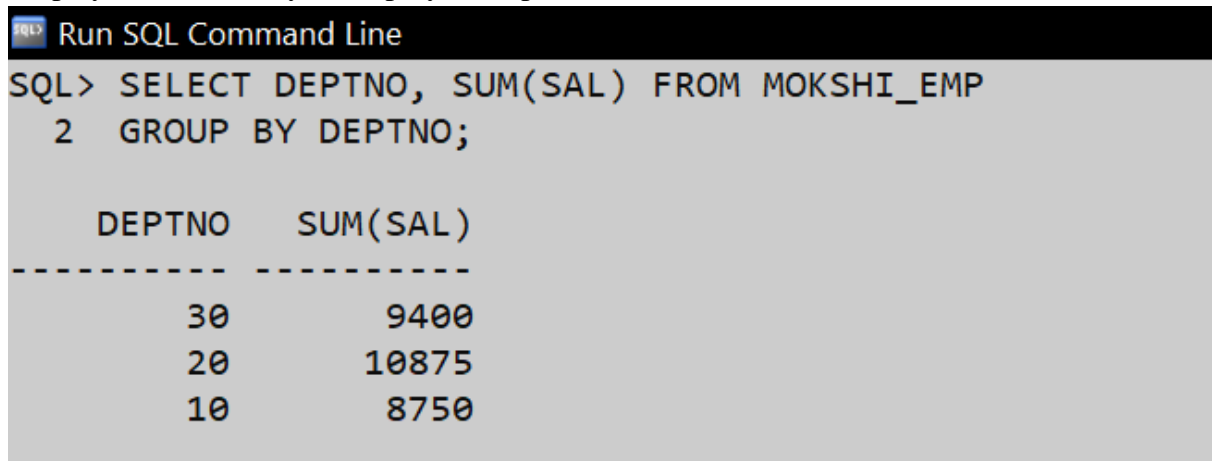


```
SQL> SELECT DEPTNO, COUNT(*)
2 FROM MOKSHI_EMP
3 GROUP BY DEPTNO;
```

DEPTNO	COUNT(*)
30	6
20	5
10	3

B) Answer the following queries:

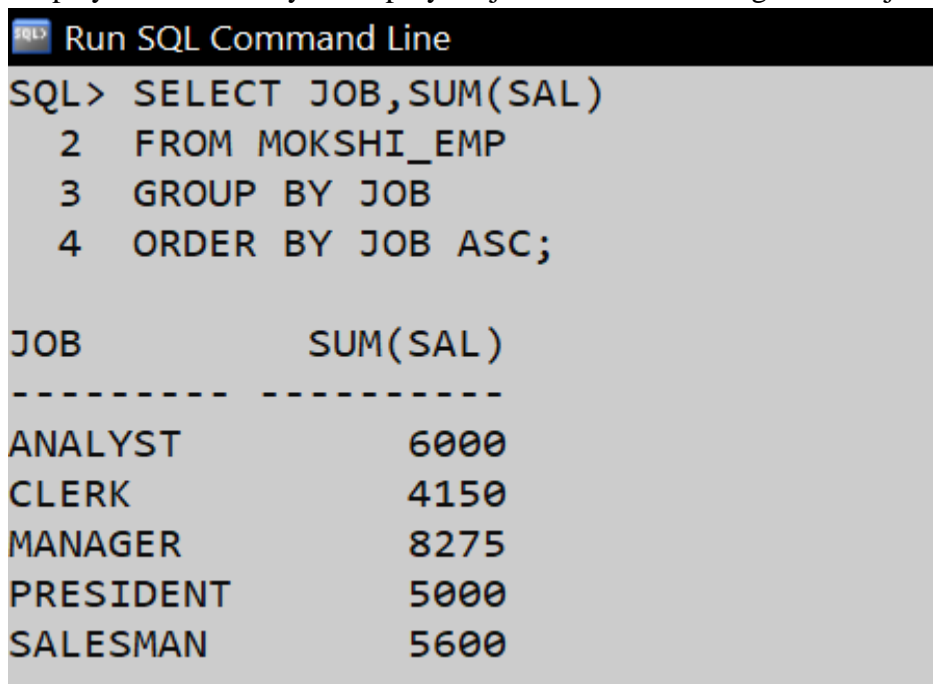
1) Display the total salary of employees department wise.



```
SQL> SELECT DEPTNO, SUM(SAL) FROM MOKSHI_EMP
2 GROUP BY DEPTNO;
```

DEPTNO	SUM(SAL)
30	9400
20	10875
10	8750

2) Display the total salary of employees job wise in ascending order of job.



```
SQL> SELECT JOB, SUM(SAL)
2 FROM MOKSHI_EMP
3 GROUP BY JOB
4 ORDER BY JOB ASC;
```

JOB	SUM(SAL)
ANALYST	6000
CLERK	4150
MANAGER	8275
PRESIDENT	5000
SALESMAN	5600

- 3) Display the total number of employees with specific job.

```
SQL> Run SQL Command Line
SQL> SELECT JOB, COUNT(*)
  2  FROM MOKSHI_EMP
  3  GROUP BY JOB;

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

- 4) Display the total number of employees working in each department.

```
SQL> Run SQL Command Line
SQL> SELECT DEPTNO, COUNT(*)
  2  FROM MOKSHI_EMP
  3  GROUP BY DEPTNO;

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

- 5) Display the total salary of employees specific to job and department in ascending order of job.

```
Run SQL Command Line
SQL> SELECT JOB, DEPTNO, SUM(SAL) FROM MOKSHI_EMP
2  GROUP BY JOB,DEPTNO
3  ORDER BY JOB;

JOB          DEPTNO  SUM(SAL)
-----
ANALYST      20      6000
CLERK        10      1300
CLERK        20      1900
CLERK        30       950
MANAGER      10      2450
MANAGER      20      2975
MANAGER      30      2850
PRESIDENT    10      5000
SALESMAN     30      5600

9 rows selected.
```

- 6) Display the total salary of the employees specific to job when employee count is greater than 1.

```
Run SQL Command Line
SQL> SELECT SUM(SAL),COUNT(JOB) FROM MOKSHI_EMP
2  GROUP BY JOB
3  HAVING COUNT(JOB)>1;

SUM(SAL)  COUNT(JOB)
-----
4150      4
5600      4
8275      3
6000      2
```

- 7) Display unique jobs of employees.

```
Run SQL Command Line
SQL> SELECT DISTINCT JOB
2  FROM MOKSHI_EMP;

JOB
-----
CLERK
SALESMAN
PRESIDENT
MANAGER
ANALYST
```