

DBMS Practical 3

1. Using emp table, perform the following queries:

- Display the details of all employees.

```
select * from emp aayush
```

Results Explain Describe Saved SQL History

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7839	KING	PRESIDENT	-	17-NOV-81	5000	-	10
7698	BLAKE	MANAGER	7839	09-MAY-81	2850	-	30
7782	CLARK	MANAGER	7839	09-JUN-81	2450	-	10
7566	JONES	MANAGER	7839	09-APR-81	2975	-	20
7788	SCOTT	ANALYST	7566	19-APR-81	3000	-	20
7902	FORD	ANALYST	7566	03-DEC-81	3000	-	20
7369	SMITH	CLERK	7902	17-DEC-80	1300	-	20
7499	ALLEN	SALESMAN	7698	20-FEB-81	1600	300	20
7521	WARD	SALESMAN	7698	22-FEB-81	1250	500	30
7654	MARTIN	SALESMAN	7698	28-FEB-81	1250	1400	30
7844	TURNER	SALESMAN	7698	08-FEB-81	1500	0	30
7876	ADAMS	CLERK	7788	23-MAY-87	1600	-	20
7900	JAMES	Manager	7698	03-DEC-81	1450	-	30
7934	MILLER	Manager	7782	23-JAN-82	1800	-	10

- Display the name and job for all employees.

•

```
select ename , job from emp_aayush;
```

Results Explain Describe Saved SQL History

ENAME	JOB
KING	PRESIDENT
BLAKE	MANAGER
CLARK	MANAGER
JONES	MANAGER
SCOTT	ANALYST
FORD	ANALYST
SMITH	CLERK
ALLEN	SALESMAN
WARD	SALESMAN
MARTIN	SALESMAN
TURNER	SALESMAN
ADAMS	CLERK
JAMES	Manager
MILLER	Manager

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- Display name and salary for all employees.

```
select ename , sal from emp_aayush;
```

Results Explain Describe Saved SQL Hist

ENAME	SAL
KING	5000
BLAKE	2850
CLARK	2450
JONES	2975
SCOTT	3000
FORD	3000
SMITH	1300
ALLEN	1600
WARD	1250
MARTIN	1250
TURNER	1500
ADAMS	1600
JAMES	1450
MILLER	1800

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

```
select * from emp_aayush  
where sal > 2000;
```

Results Explain Describe Saved SQL History

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7839	KING	PRESIDENT	-	17-NOV-81	5000	-	10
7698	BLAKE	MANAGER	7839	09-MAY-81	2850	-	30
7782	CLARK	MANAGER	7839	09-JUN-81	2450	-	10
7566	JONES	MANAGER	7839	09-APR-81	2975	-	20
7788	SCOTT	ANALYST	7566	19-APR-81	3000	-	20
7902	FORD	ANALYST	7566	03-DEC-81	3000	-	20

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

```
select * from emp_aayush  
where job = 'MANAGER';
```

Results Explain Describe Saved SQL History

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7698	BLAKE	MANAGER	7839	09-MAY-81	2850	-	30
7782	CLARK	MANAGER	7839	09-JUN-81	2450	-	10
7566	JONES	MANAGER	7839	09-APR-81	2975	-	20

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

```
select ename from emp_aayush  
where DEPTNO =10;
```

Results Explain Describe Saved SQL History

ENAME
KING
CLARK
MILLER

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

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```
select ename from emp_aayush  
where job = 'CLERK' or sal > 3000;
```

Results Explain Describe Saved SQL History

ENAME
KING
SMITH
ADAMS

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

```
select empno , ename from emp_aayush  
where comm is not null;
```

Results Explain Describe Saved SQL History

EMPNO	ENAME
7499	ALLEN
7521	WARD
7654	MARTIN
7844	TURNER

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

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```
select ename from emp_aayush  
where comm is null;
```

Results Explain Describe Saved SQL History

ENAME
KING
BLAKE
CLARK
JONES
SCOTT
FORD
SMITH
ADAMS
JAMES
MILLER

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

```
select ename from emp_aayush  
where job = 'CLERK' or job = 'SALESMAN' or job = 'ANALYST' and sal>2000;
```

Results Explain Describe Saved SQL History

ENAME
SCOTT
FORD
SMITH
ALLEN
WARD
MARTIN
TURNER
ADAMS

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

```
select ename from emp_aayush  
where job = 'CLERK' or job = 'SALESMAN' or job = 'ANALYST' |;
```

Results Explain Describe Saved SQL History

ENAME
SCOTT
FORD
SMITH
ALLEN
WARD
MARTIN
TURNER
ADAMS

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

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```
select ename from emp_aayush  
where deptno =10 or deptno = 20 or deptno = 30 ;
```

Results Explain Describe Saved SQL History

ENAME
KING
BLAKE
CLARK
JONES
SCOTT
FORD
SMITH
ALLEN
WARD
MARTIN
TURNER
ADAMS
JAMES
MILLER

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

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```
select * from emp aayush  
where sal between 1000 and 2000 ;
```

Results Explain Describe Saved SQL History

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7369	SMITH	CLERK	7902	17-DEC-80	1300	-	20
7499	ALLEN	SALESMAN	7698	20-FEB-81	1600	300	20
7521	WARD	SALESMAN	7698	22-FEB-81	1250	500	30
7654	MARTIN	SALESMAN	7698	28-FEB-81	1250	1400	30
7844	TURNER	SALESMAN	7698	08-FEB-81	1500	0	30
7876	ADAMS	CLERK	7788	23-MAY-87	1600	-	20
7900	JAMES	Manager	7698	03-DEC-81	1450	-	30
7934	MILLER	Manager	7782	23-JAN-82	1800	-	10

- List the employees in the ascending order of their salaries.

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```
select * from emp_aayush  
ORDER BY SAL ASC ;
```

Results	Explain	Describe	Saved SQL	History			
EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7654	MARTIN	SALESMAN	7698	28-FEB-81	1250	1400	30
7521	WARD	SALESMAN	7698	22-FEB-81	1250	500	30
7369	SMITH	CLERK	7902	17-DEC-80	1300	-	20
7900	JAMES	Manager	7698	03-DEC-81	1450	-	30
7844	TURNER	SALESMAN	7698	08-FEB-81	1500	0	30
7876	ADAMS	CLERK	7788	23-MAY-87	1600	-	20
7499	ALLEN	SALESMAN	7698	20-FEB-81	1600	300	20
7934	MILLER	Manager	7782	23-JAN-82	1800	-	10
7782	CLARK	MANAGER	7839	09-JUN-81	2450	-	10
7698	BLAKE	MANAGER	7839	09-MAY-81	2850	-	30
7566	JONES	MANAGER	7839	09-APR-81	2975	-	20
7902	FORD	ANALYST	7566	03-DEC-81	3000	-	20
7788	SCOTT	ANALYST	7566	19-APR-81	3000	-	20
7839	KING	PRESIDENT	-	17-NOV-81	5000	-	10

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

```
select empno, ename, sal from emp_aayush  
where MGR = 7369;
```

Results	Explain	Describe	Saved SQL	History
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no data found

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

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```
where job = 'CLERK' or job = 'ANALYST'  
order by job desc;
```

Results Explain Describe Saved SQL History

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7369	SMITH	CLERK	7902	17-DEC-80	1300	-	20
7876	ADAMS	CLERK	7788	23-MAY-87	1600	-	20
7788	SCOTT	ANALYST	7566	19-APR-81	3000	-	20
7902	FORD	ANALYST	7566	03-DEC-81	3000	-	20

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

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```
select * from emp_aayush  
where deptno =10 or deptno=20;
```

Results Explain Describe Saved SQL History

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7839	KING	PRESIDENT	-	17-NOV-81	5000	-	10
7782	CLARK	MANAGER	7839	09-JUN-81	2450	-	10
7566	JONES	MANAGER	7839	09-APR-81	2975	-	20
7788	SCOTT	ANALYST	7566	19-APR-81	3000	-	20
7902	FORD	ANALYST	7566	03-DEC-81	3000	-	20
7369	SMITH	CLERK	7902	17-DEC-80	1300	-	20
7499	ALLEN	SALESMAN	7698	20-FEB-81	1600	300	20
7876	ADAMS	CLERK	7788	23-MAY-87	1600	-	20
7934	MILLER	Manager	7782	23-JAN-82	1800	-	10

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

```
select * from emp_aayush  
where ename like '%LL%';
```

Results Explain Describe Saved SQL History

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7499	ALLEN	SALESMAN	7698	20-FEB-81	1600	300	20
7934	MILLER	Manager	7782	23-JAN-82	1800	-	10

- List the employees in ascending order of their names.

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```
select * from emp_aayush  
order by ename asc;
```

Results Explain Describe Saved SQL History

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7876	ADAMS	CLERK	7788	23-MAY-87	1600	-	20
7499	ALLEN	SALESMAN	7698	20-FEB-81	1600	300	20
7698	BLAKE	MANAGER	7839	09-MAY-81	2850	-	30
7782	CLARK	MANAGER	7839	09-JUN-81	2450	-	10
7902	FORD	ANALYST	7566	03-DEC-81	3000	-	20
7900	JAMES	Manager	7698	03-DEC-81	1450	-	30
7566	JONES	MANAGER	7839	09-APR-81	2975	-	20
7839	KING	PRESIDENT	-	17-NOV-81	5000	-	10
7654	MARTIN	SALESMAN	7698	28-FEB-81	1250	1400	30
7934	MILLER	Manager	7782	23-JAN-82	1800	-	10
7788	SCOTT	ANALYST	7566	19-APR-81	3000	-	20
7369	SMITH	CLERK	7902	17-DEC-80	1300	-	20
7844	TURNER	SALESMAN	7698	08-FEB-81	1500	0	30
7521	WARD	SALESMAN	7698	22-FEB-81	1250	500	30

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- List the employees in descending order of their names.

```
select * from emp_aayush  
order by ename desc;
```

Results Explain Describe Saved SQL History

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7521	WARD	SALESMAN	7698	22-FEB-81	1250	500	30
7844	TURNER	SALESMAN	7698	08-FEB-81	1500	0	30
7369	SMITH	CLERK	7902	17-DEC-80	1300	-	20
7788	SCOTT	ANALYST	7566	19-APR-81	3000	-	20
7934	MILLER	Manager	7782	23-JAN-82	1800	-	10
7654	MARTIN	SALESMAN	7698	28-FEB-81	1250	1400	30
7839	KING	PRESIDENT	-	17-NOV-81	5000	-	10
7566	JONES	MANAGER	7839	09-APR-81	2975	-	20
7900	JAMES	Manager	7698	03-DEC-81	1450	-	30
7902	FORD	ANALYST	7566	03-DEC-81	3000	-	20
7782	CLARK	MANAGER	7839	09-JUN-81	2450	-	10
7698	BLAKE	MANAGER	7839	09-MAY-81	2850	-	30
7499	ALLEN	SALESMAN	7698	20-FEB-81	1600	300	20
7876	ADAMS	CLERK	7788	23-MAY-87	1600	-	20

- List the employees who do not belong to Deptno 20.

```
select * from emp_aayush  
where deptno not in(20);
```

Results Explain Describe Saved SQL History

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7839	KING	PRESIDENT	-	17-NOV-81	5000	-	10
7698	BLAKE	MANAGER	7839	09-MAY-81	2850	-	30
7782	CLARK	MANAGER	7839	09-JUN-81	2450	-	10
7521	WARD	SALESMAN	7698	22-FEB-81	1250	500	30
7654	MARTIN	SALESMAN	7698	28-FEB-81	1250	1400	30
7844	TURNER	SALESMAN	7698	08-FEB-81	1500	0	30
7900	JAMES	Manager	7698	03-DEC-81	1450	-	30
7934	MILLER	Manager	7782	23-JAN-82	1800	-	10

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- List all the employees except PRESIDENT and MANAGER.

```
select * from emp_aayush  
where job not IN('PRESIDENT','MANAGER');
```

Results Explain Describe Saved SQL History

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7788	SCOTT	ANALYST	7566	19-APR-81	3000	-	20
7902	FORD	ANALYST	7566	03-DEC-81	3000	-	20
7369	SMITH	CLERK	7902	17-DEC-80	1300	-	20
7499	ALLEN	SALESMAN	7698	20-FEB-81	1600	300	20
7521	WARD	SALESMAN	7698	22-FEB-81	1250	500	30
7654	MARTIN	SALESMAN	7698	28-FEB-81	1250	1400	30
7844	TURNER	SALESMAN	7698	08-FEB-81	1500	0	30
7876	ADAMS	CLERK	7788	23-MAY-87	1600	-	20

- List the employees whose name starts with A.

```
select * from emp_aayush  
where ename like 'A%';
```

Results Explain Describe Saved SQL History

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

- List all the Clerks of Deptno 20.


```
select * from emp_aayush  
where job = 'CLERK' and deptno = 20;
```

Results Explain Describe Saved SQL History

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7369	SMITH	CLERK	7902	17-DEC-80	1300	-	20
7876	ADAMS	CLERK	7788	23-MAY-87	1600	-	20

- List the employees whose names ends with S.

```
select * from emp_aayush  
where ename like '%S';
```

Results Explain Describe Saved SQL History

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7566	JONES	MANAGER	7839	09-APR-81	2975	-	20
7876	ADAMS	CLERK	7788	23-MAY-87	1600	-	20
7900	JAMES	Manager	7698	03-DEC-81	1450	-	30

- List the employees who has name of exactly 4 characters.

```
select * from emp_aayush  
where ename like '____';
```

Results Explain Describe Saved SQL History

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7839	KING	PRESIDENT	-	17-NOV-81	5000	-	10
7902	FORD	ANALYST	7566	03-DEC-81	3000	-	20
7521	WARD	SALESMAN	7698	22-FEB-81	1250	500	30

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

```
select ename from emp aayush  
where job = 'MANAGER' and deptno = 10;
```

Results Explain Describe Saved SQL History

ENAME

CLARK

- List the total salary of employees working as ANALYST.

```
select sum(sal) from emp aayush  
where job = 'ANALYST' ;
```

Results Explain Describe Saved SQL History

SUM(SAL)

6000

- List the minimum, maximum and average salary of the employees.

```
select avg(sal), max(sal) , min(sal) from emp aayush;
```

Results Explain Describe Saved SQL History

AVG(SAL)	MAX(SAL)	MIN(SAL)
2216.07142857142857142857142857143	5000	1250

- List the total number of employees working in department 10.

```
select count(*) from emp aayush  
where deptno=10;
```

Results Explain Describe Saved SQL History

COUNT(*)

3

2. Answer the following queries:

- Display the total salary of employee's department wise.

```
select deptno ,sum(sal) from emp aayush  
group by deptno;
```

Results Explain Describe Saved SQL History

DEPTNO	SUM(SAL)
30	8300
20	13475
10	9250

- Display the total salary of employee's job wise in ascending order of job.

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```
select job,sum(sal) from emp_aayush  
group by job  
order by job asc;
```

Results Explain Describe Saved SQL History

JOB	SUM(SAL)
ANALYST	6000
CLERK	2900
MANAGER	8275
Manager	3250
PRESIDENT	5000
SALESMAN	5600

- Display the total number of employees with specific job.

```
select job, count(*) from emp_aayush  
group by job;
```

Results Explain Describe Saved SQL History

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

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

```
select deptno, count(*) from emp_aayush  
group by deptno;
```

Results Explain Describe Saved SQL History

DEPTNO	COUNT(*)
30	5
20	6
10	3

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

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```
select job, deptno, sum(sal) from emp aayush  
group by job,deptno  
order by job asc;
```

Results Explain Describe Saved SQL History

JOB	DEPTNO	SUM(SAL)
ANALYST	20	6000
CLERK	20	2900
MANAGER	10	2450
MANAGER	20	2975
MANAGER	30	2850
Manager	10	1800
Manager	30	1450
PRESIDENT	10	5000
SALESMAN	20	1600
SALESMAN	30	4000

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

```
select job, sum(sal), count(*) from emp_aayush  
group by job  
having count(job)>1;
```

Results Explain Describe Saved SQL History

JOB	SUM(SAL)	COUNT(*)
Manager	3250	2
CLERK	2900	2
SALESMAN	5600	4
MANAGER	8275	3
ANALYST	6000	2

- Display unique jobs of employees.

```
select distinct job from emp_aayush;
```

Results Explain Describe Saved SQL History

JOB
Manager
CLERK
SALESMAN
PRESIDENT
MANAGER
ANALYST