

**LAB**  
**ASSIGNMENT: 02**  
**SQL Practice II**

Name and Seat no: Syed Wasif Ali (B20102171)

Database Name: B20102171

Table Names:

- WorkerSWA
- BonusSWA
- TitleSWA

**TASKS:**

1. Write an SQL query to print details of Workers with DEPARTMENT name as “Admin”.

Query:

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```
SELECT * FROM WorkerSWA  
WHERE DEPARTMENT = "Admin";
```

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## Result:

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
2	Niharika	Verma	80000	2014-06-11 09:00:00	Admin
4	Amitabh	Singh	500000	2014-02-20 09:00:00	Admin
5	Vivek	Bhati	500000	2014-06-11 09:00:00	Admin
8	Geetika	Chauhan	90000	2014-04-11 09:00:00	Admin

2. Write an SQL query to print details of the Workers whose FIRST\_NAME contains 'a'.

## Query:

```
SELECT * FROM WorkerSWA  
WHERE FIRST_NAME LIKE "%a%"
```

## Result:

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	Monika	Arora	100000	2014-02-20 09:00:00	HR
2	Niharika	Verma	80000	2014-06-11 09:00:00	Admin
3	Vishal	Singhal	300000	2014-02-20 09:00:00	HR
4	Amitabh	Singh	500000	2014-02-20 09:00:00	Admin
7	Satish	Kumar	75000	2014-01-20 09:00:00	Account
8	Geetika	Chauhan	90000	2014-04-11 09:00:00	Admin

3. Write an SQL query to print details of the Workers whose FIRST\_NAME ends with 'a'.

## Query:

```
SELECT * FROM WorkerSWA  
WHERE FIRST_NAME LIKE "%a"
```

## Result:

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	Monika	Arora	100000	2014-02-20 09:00:00	HR
2	Niharika	Verma	80000	2014-06-11 09:00:00	Admin
8	Geetika	Chauhan	90000	2014-04-11 09:00:00	Admin

4. Write an SQL query to print details of the Workers whose FIRST\_NAME ends with 'h' and contains six alphabets.

Query:

```
SELECT * FROM WorkerSWA
WHERE FIRST_NAME LIKE '____h'
```

Result:

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
7	Satish	Kumar	75000	2014-01-20 09:00:00	Account

5. Write an SQL query to fetch the count of employees working in the department 'Admin'.

Query:

```
SELECT COUNT(*) AS WorkersCount
FROM WorkerSWA
WHERE Department = 'Admin';
```

Result:

WorkersCount
4

6. Write an SQL query to fetch worker names with salaries  $\geq 50000$  and  $\leq 100000$ .

Query:

```
SELECT FIRST_NAME || ' ' || LAST_NAME AS WORKER_NAME
FROM WorkerSWA
WHERE SALARY  $\geq$  50000 AND SALARY  $\leq$  100000;
```

Result:

WORKER_NAME
Monika Arora
Niharika Verma
Satish Kumar
Geetika Chauhan

7. Write an SQL query to fetch the no. of workers for each department in the descending order.

Query:

```
SELECT DEPARTMENT, COUNT(*) AS WorkerCount
FROM WorkerSWA
GROUP BY DEPARTMENT
ORDER BY WorkerCount DESC;
```

Result:

DEPARTMENT	WorkerCount
Admin	4
HR	2
Account	2

8. Write an SQL query to print details of the Workers who are also Managers.

Query:

```
SELECT DISTINCT W.FIRST_NAME, T.WORKER_TITLE
FROM WorkerSWA W
INNER JOIN TitleSWA T
ON W.WORKER_ID = T.WORKER_REF_ID
AND T.WORKER_TITLE in ('Manager');
```

Result:

FIRST_NAME	WORKER_TITLE
Monika	Manager
Vivek	Manager

9. Write an SQL query to fetch duplicate records having matching data in some fields of a table.

Query:

```
SELECT WORKER_TITLE, AFFECTED_FROM, COUNT(*)
FROM TitleSWA
GROUP BY WORKER_TITLE, AFFECTED_FROM
HAVING COUNT(*) > 1;
```

## Result:

WORKER_TITLE	AFFECTED_FROM	COUNT(*)
Executive	2016-06-11 00:00:00	3
Lead	2016-06-11 00:00:00	2

10. Write an SQL query to show only odd rows from a table.

## Query:

```
SELECT * FROM WorkerSWA WHERE WORKER_ID & 1 = 1;
```

## Result:

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	Monika	Arora	100000	2014-02-20 09:00:00	HR
3	Vishal	Singhal	300000	2014-02-20 09:00:00	HR
5	Vivek	Bhati	500000	2014-06-11 09:00:00	Admin
7	Satish	Kumar	75000	2014-01-20 09:00:00	Account

11. Write an SQL query to show only even rows from a table.

## Query:

```
SELECT * FROM WorkerSWA WHERE WORKER_ID & 1 = 0;
```

## Result:

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
2	Niharika	Verma	80000	2014-06-11 09:00:00	Admin
4	Amitabh	Singh	500000	2014-02-20 09:00:00	Admin
6	Vipul	Diwan	200000	2014-06-11 09:00:00	Account
8	Geetika	Chauhan	90000	2014-04-11 09:00:00	Admin

12. Write an SQL query to show the top 10 records of a table.

### Query:

```
SELECT * FROM WorkerSWA ORDER BY Salary DESC LIMIT 10;
```

### Result:

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
4	Amitabh	Singh	500000	2014-02-20 09:00:00	Admin
5	Vivek	Bhati	500000	2014-06-11 09:00:00	Admin
3	Vishal	Singhal	300000	2014-02-20 09:00:00	HR
6	Vipul	Diwan	200000	2014-06-11 09:00:00	Account
1	Monika	Arora	100000	2014-02-20 09:00:00	HR
8	Geetika	Chauhan	90000	2014-04-11 09:00:00	Admin
2	Niharika	Verma	80000	2014-06-11 09:00:00	Admin
7	Satish	Kumar	75000	2014-01-20 09:00:00	Account

13. Write an SQL query to determine the 5th highest salary from a table.

### Query:

```
SELECT Salary FROM WorkerSWA ORDER BY Salary DESC LIMIT 5-1,1;
```

### Result:

SALARY

100000

14. Write an SQL query to determine the 5th highest salary without using TOP or limit method.

### Query:

```
SELECT Salary
FROM WorkerSWA W1
WHERE 4 = (
    SELECT COUNT( DISTINCT ( W2.Salary ) )
    FROM WorkerSWA W2
    WHERE W2.Salary >= W1.Salary
);
```



## Result:

SALARY
100000

15. Write an SQL query to fetch the list of employees with the same salary.

## Query:

```
Select distinct W.WORKER_ID, W.FIRST_NAME, W.Salary
from WorkerSWA W, WorkerSWA W1
where W.Salary = W1.Salary
and W.WORKER_ID != W1.WORKER_ID;
```

## Result:

WORKER_ID	FIRST_NAME	SALARY
4	Amitabh	500000
5	Vivek	500000

16. Write an SQL query to fetch the first 50% records from a table.

## Query:

```
SELECT *
FROM WorkerSWA
WHERE WORKER_ID <= (SELECT count(WORKER_ID)/2 from WorkerSWA);
```

## Result:

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
1	Monika	Arora	100000	2014-02-20 09:00:00	HR
2	Niharika	Verma	80000	2014-06-11 09:00:00	Admin
3	Vishal	Singhal	300000	2014-02-20 09:00:00	HR
4	Amitabh	Singh	500000	2014-02-20 09:00:00	Admin

17. Write an SQL query to fetch the departments that have less than five people in it.

Query:

```
SELECT DEPARTMENT, COUNT(WORKER_ID) AS 'Number of Workers'
FROM WorkerSWA
GROUP BY DEPARTMENT
HAVING COUNT(WORKER_ID) < 5;
```

Result:

DEPARTMENT	Number of Workers
Account	2
Admin	4
HR	2

Activate

18. Write an SQL query to print the name of employees having the highest salary in each department.

Query:

```
SELECT t.DEPARTMENT,t.FIRST_NAME,t.Salary
FROM(SELECT max(Salary)AS TotalSalary,DEPARTMENT
FROM WorkerSWA
GROUP BY DEPARTMENT) AS TempNew
Inner JOIN WorkerSWA t ON TempNew.DEPARTMENT=t.DEPARTMENT AND TempNew.TotalSalary=t.Salary;
```

Result:

DEPARTMENT	FIRST_NAME	SALARY
HR	Vishal	300000
Admin	Amitabh	500000
Admin	Vivek	500000
Account	Vipul	200000

Activate Windows

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19. Write an SQL query to fetch departments along with the total salaries paid for each of them.

Query:

```
SELECT DEPARTMENT, SUM (Salary)
FROM workerSWA GROUP BY DEPARTMENT;
```

Result:



DEPARTMENT	SUM (Salary)
Account	275000
Admin	1170000
HR	400000

20. Write an SQL query to fetch the names of workers who earn the highest salary.

Query:

```
SELECT FIRST_NAME, SALARY
FROM WorkerSWA
WHERE SALARY=(SELECT max(SALARY) FROM WorkerSWA);
```

Result:

FIRST_NAME	SALARY
Amitabh	500000
Vivek	500000