

Name: Pranav Gadakh.

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MySQL 8.0 Command Line Client
mysql> select*from worker;
+-----+-----+-----+-----+-----+-----+
| WORKER_ID | FIRST_NAME | LAST_NAME | SALARY | JOINING_DATE | DEPARTMENT |
+-----+-----+-----+-----+-----+-----+
| 001      | Monika    | Arora     | 100000 | 2021-02-20 00:00:00 | Admin      |
| 002      | Niharika  | Verma     | 80000  | 2021-06-11 00:00:00 | Manager    |
| 003      | Vishal    | Singhal   | 300000 | 2021-02-20 00:00:00 | Manager    |
| 004      | Amitabh   | Singh     | 500000 | 2021-02-20 00:00:00 | Admin      |
| 005      | Vivek     | Bhati     | 500000 | 2021-06-11 00:00:00 | HR         |
| 006      | Vipul     | Diwan     | 200000 | 2021-06-11 00:00:00 | Developer  |
| 007      | Satish    | Kumar     | 75000  | 2021-01-20 00:00:00 | Intern     |
| 008      | Geetika   | Chauhan   | 90000  | 2021-04-11 00:00:00 | Tester     |
+-----+-----+-----+-----+-----+-----+
8 rows in set (0.00 sec)

mysql> /*Q.1. Write an sql query to fetch "FIRST_NAME" from the Worker table using the alias name <WORKER_NAME>*/
mysql> select FIRST_NAME as WORKER_NAME from worker;
+-----+
| WORKER_NAME |
+-----+
| Monika      |
| Niharika    |
| Vishal      |
| Amitabh     |
| Vivek       |
| Vipul       |
| Satish      |
| Geetika     |
+-----+
8 rows in set (0.00 sec)

mysql> /*Q.2. Write an SQL query to fetch "FIRST_NAME" from the Worker table in Upper case.*/
mysql> select Upper(FIRST_NAME) from worker;
+-----+
| Upper(FIRST_NAME) |
+-----+
| MONIKA            |
| NIHARIKA          |
| VISHAL            |
| AMITABH           |
| VIVEK             |
| VIPUL             |
| SATISH            |
| GEETIKA           |
+-----+
8 rows in set (0.00 sec)

mysql> /*Q.3. Write an SQL query to print all Worker details from Worker table order by FIRST_NAME Ascending and DEPARTMENT Descending.*/
mysql> select*from worker order by FIRST_NAME;
+-----+-----+-----+-----+-----+-----+
| WORKER_ID | FIRST_NAME | LAST_NAME | SALARY | JOINING_DATE | DEPARTMENT |
+-----+-----+-----+-----+-----+-----+
| 004      | Amitabh   | Singh     | 500000 | 2021-02-20 00:00:00 | Admin      |
| 008      | Geetika   | Chauhan   | 90000  | 2021-04-11 00:00:00 | Tester     |
| 001      | Monika    | Arora     | 100000 | 2021-02-20 00:00:00 | Admin      |
| 002      | Niharika  | Verma     | 80000  | 2021-06-11 00:00:00 | Manager    |
| 007      | Satish    | Kumar     | 75000  | 2021-01-20 00:00:00 | Intern     |
| 006      | Vipul     | Diwan     | 200000 | 2021-06-11 00:00:00 | Developer  |
| 003      | Vishal    | Singhal   | 300000 | 2021-02-20 00:00:00 | Manager    |
| 005      | Vivek     | Bhati     | 500000 | 2021-06-11 00:00:00 | HR         |
+-----+-----+-----+-----+-----+-----+
8 rows in set (0.00 sec)

mysql> select*from worker order by DEPARTMENT desc;
+-----+-----+-----+-----+-----+-----+
| WORKER_ID | FIRST_NAME | LAST_NAME | SALARY | JOINING_DATE | DEPARTMENT |
+-----+-----+-----+-----+-----+-----+
| 008      | Geetika   | Chauhan   | 90000  | 2021-04-11 00:00:00 | Tester     |
| 002      | Niharika  | Verma     | 80000  | 2021-06-11 00:00:00 | Manager    |
| 003      | Vishal    | Singhal   | 300000 | 2021-02-20 00:00:00 | Manager    |
| 007      | Satish    | Kumar     | 75000  | 2021-01-20 00:00:00 | Intern     |
| 005      | Vivek     | Bhati     | 500000 | 2021-06-11 00:00:00 | HR         |
| 006      | Vipul     | Diwan     | 200000 | 2021-06-11 00:00:00 | Developer  |
| 001      | Monika    | Arora     | 100000 | 2021-02-20 00:00:00 | Admin      |
| 004      | Amitabh   | Singh     | 500000 | 2021-02-20 00:00:00 | Admin      |
+-----+-----+-----+-----+-----+-----+
8 rows in set (0.00 sec)

mysql> /*Q.4. Write an SQL query to print details for Workers with first names "Vipul" and "Satish" from Worker table.*/
mysql> select*from worker where FIRST_NAME in("Vipul","Satish");
+-----+-----+-----+-----+-----+-----+
| WORKER_ID | FIRST_NAME | LAST_NAME | SALARY | JOINING_DATE | DEPARTMENT |
+-----+-----+-----+-----+-----+-----+
| 006      | Vipul     | Diwan     | 200000 | 2021-06-11 00:00:00 | Developer  |
| 007      | Satish    | Kumar     | 75000  | 2021-01-20 00:00:00 | Intern     |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)

mysql> /*Q.5. Write an SQL query to print details of workers excluding first names, "Vipul" and "Satish" from the Worker table.*/
mysql> select*from worker where FIRST_NAME not in("Vipul","Satish");
+-----+-----+-----+-----+-----+-----+
| WORKER_ID | FIRST_NAME | LAST_NAME | SALARY | JOINING_DATE | DEPARTMENT |
+-----+-----+-----+-----+-----+-----+
| 001      | Monika    | Arora     | 100000 | 2021-02-20 00:00:00 | Admin      |
| 002      | Niharika  | Verma     | 80000  | 2021-06-11 00:00:00 | Manager    |
| 003      | Vishal    | Singhal   | 300000 | 2021-02-20 00:00:00 | Manager    |
| 004      | Amitabh   | Singh     | 500000 | 2021-02-20 00:00:00 | Admin      |
| 005      | Vivek     | Bhati     | 500000 | 2021-06-11 00:00:00 | HR         |
| 008      | Geetika   | Chauhan   | 90000  | 2021-04-11 00:00:00 | Tester     |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.00 sec)
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mysql> /*Q.6. Write an SQL query to print details of workers with DEPARTMENT name as "Admin".*/
mysql> select*from worker where DEPARTMENT="Admin";
```

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
001	Monika	Arora	100000	2021-02-20 00:00:00	Admin
004	Amitabh	Singh	500000	2021-02-20 00:00:00	Admin

2 rows in set (0.00 sec)

```
mysql> /*Q.7. Write an SQL query to print details of the Workers whose FIRST_NAME contains 'a'.*/
mysql> select*from worker where FIRST_NAME like '%a%';
```

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
001	Monika	Arora	100000	2021-02-20 00:00:00	Admin
002	Niharika	Verma	80000	2021-06-11 00:00:00	Manager
003	Vishal	Singhal	300000	2021-02-20 00:00:00	Manager
004	Amitabh	Singh	500000	2021-02-20 00:00:00	Admin
007	Satish	Kumar	75000	2021-01-20 00:00:00	Intern
008	Geetika	Chauhan	90000	2021-04-11 00:00:00	Tester

6 rows in set (0.00 sec)

```
mysql> /*Q.8. Write an SQL query to print details of the workers whose FIRST_NAME ends with 'a'.*/
mysql> select*from worker where FIRST_NAME like '%a';
```

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
001	Monika	Arora	100000	2021-02-20 00:00:00	Admin
002	Niharika	Verma	80000	2021-06-11 00:00:00	Manager
008	Geetika	Chauhan	90000	2021-04-11 00:00:00	Tester

3 rows in set (0.00 sec)

```
mysql> /*Q.9. Write an SQL query to print details of the workers whose FIRST_NAME ends with 'h' and contains six alphabets.*/
mysql> select*from worker where FIRST_NAME like '_____h';
```

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
007	Satish	Kumar	75000	2021-01-20 00:00:00	Intern

1 row in set (0.00 sec)

```
mysql> /*Q.10. Write an SQL query to print details of the Workers whose SALARY lies between 100000 and 500000.*/
mysql> select*from worker where SALARY between 100000 and 500000;
```

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
001	Monika	Arora	100000	2021-02-20 00:00:00	Admin
003	Vishal	Singhal	300000	2021-02-20 00:00:00	Manager
004	Amitabh	Singh	500000	2021-02-20 00:00:00	Admin
005	Vivek	Bhati	500000	2021-06-11 00:00:00	HR
006	Vipul	Diwan	200000	2021-06-11 00:00:00	Developer

5 rows in set (0.00 sec)

```
mysql> /*Write an SQL query to fetch the count of employees working in the department 'Admin'.*/
mysql> select COUNT(DEPARTMENT) from worker where DEPARTMENT="Admin";
```

COUNT(DEPARTMENT)
2

1 row in set (0.00 sec)

```
mysql> /*Write an SQL query to fetch worker names with salaries >=50000 and <=100000.*/
mysql> select*from worker where SALARY>=50000 and SALARY<=100000;
```

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
001	Monika	Arora	100000	2021-02-20 00:00:00	Admin
002	Niharika	Verma	80000	2021-06-11 00:00:00	Manager
007	Satish	Kumar	75000	2021-01-20 00:00:00	Intern
008	Geetika	Chauhan	90000	2021-04-11 00:00:00	Tester

4 rows in set (0.00 sec)

```
mysql> /*Q.13. Write an SQL query to fetch the number of workers for each department in descending order.*/
mysql> select DEPARTMENT, count(WORKER_ID) NumberOfWorkers from worker group by DEPARTMENT order by NumberOfWorkers desc;
```

DEPARTMENT	NumberOfWorkers
Admin	2
Manager	2
HR	1
Developer	1
Intern	1
Tester	1

6 rows in set (0.00 sec)

```
mysql> /*Q.14. Write an SQL query to print details of the workers who are also Managers.*/
mysql> select*from worker where DEPARTMENT="Manager";
```

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
002	Niharika	Verma	80000	2021-06-11 00:00:00	Manager
003	Vishal	Singhal	300000	2021-02-20 00:00:00	Manager

2 rows in set (0.00 sec)

```

mysql> /*Q.15. Write an SQL query to print details of workers excluding first names, "Vipul" and "Satish" from the Worker table.*/
mysql> select*from worker where FIRST_NAME not in("Vipul","Satish");
+-----+-----+-----+-----+-----+-----+
| WORKER_ID | FIRST_NAME | LAST_NAME | SALARY | JOINING_DATE | DEPARTMENT |
+-----+-----+-----+-----+-----+-----+
| 001       | Monika     | Arora     | 100000 | 2021-02-20 00:00:00 | Admin       |
| 002       | Niharika   | Verma     | 80000  | 2021-06-11 00:00:00 | Manager     |
| 003       | Vishal     | Singhal   | 300000 | 2021-02-20 00:00:00 | Manager     |
| 004       | Amitabh    | Singh     | 500000 | 2021-02-20 00:00:00 | Admin       |
| 005       | Vivek      | Bhati     | 500000 | 2021-06-11 00:00:00 | HR          |
| 008       | Geetika    | Chauhan   | 90000  | 2021-04-11 00:00:00 | Tester      |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.00 sec)

mysql> /*Q.16. Write an SQL query to print details of the Workers whose FIRST_NAME ends with 'h' and contains six alphabets.*/
mysql> select*from worker where FIRST_NAME like '____h';
+-----+-----+-----+-----+-----+-----+
| WORKER_ID | FIRST_NAME | LAST_NAME | SALARY | JOINING_DATE | DEPARTMENT |
+-----+-----+-----+-----+-----+-----+
| 007       | Satish     | Kumar     | 75000  | 2021-01-20 00:00:00 | Intern      |
+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)

mysql> /*Q.17. Write an SQL query to show the top n(say 10) records of a table.*/
mysql> select*from worker limit 10;
+-----+-----+-----+-----+-----+-----+
| WORKER_ID | FIRST_NAME | LAST_NAME | SALARY | JOINING_DATE | DEPARTMENT |
+-----+-----+-----+-----+-----+-----+
| 001       | Monika     | Arora     | 100000 | 2021-02-20 00:00:00 | Admin       |
| 002       | Niharika   | Verma     | 80000  | 2021-06-11 00:00:00 | Manager     |
| 003       | Vishal     | Singhal   | 300000 | 2021-02-20 00:00:00 | Manager     |
| 004       | Amitabh    | Singh     | 500000 | 2021-02-20 00:00:00 | Admin       |
| 005       | Vivek      | Bhati     | 500000 | 2021-06-11 00:00:00 | HR          |
| 006       | Vipul      | Diwan     | 200000 | 2021-06-11 00:00:00 | Developer   |
| 007       | Satish     | Kumar     | 75000  | 2021-01-20 00:00:00 | Intern      |
| 008       | Geetika    | Chauhan   | 90000  | 2021-04-11 00:00:00 | Tester      |
+-----+-----+-----+-----+-----+-----+
8 rows in set (0.00 sec)

mysql> /*Q.18. Write an SQL query to determine the n=1,2,3,4.*/
mysql> select*from worker limit 4;
+-----+-----+-----+-----+-----+-----+
| WORKER_ID | FIRST_NAME | LAST_NAME | SALARY | JOINING_DATE | DEPARTMENT |
+-----+-----+-----+-----+-----+-----+
| 001       | Monika     | Arora     | 100000 | 2021-02-20 00:00:00 | Admin       |
| 002       | Niharika   | Verma     | 80000  | 2021-06-11 00:00:00 | Manager     |
| 003       | Vishal     | Singhal   | 300000 | 2021-02-20 00:00:00 | Manager     |
| 004       | Amitabh    | Singh     | 500000 | 2021-02-20 00:00:00 | Admin       |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)

mysql> /*Q.19. Write an SQL query to determine nth (say n=5) highest salary from a table.*/
mysql> select*from worker order by SALARY desc limit 4,1;
+-----+-----+-----+-----+-----+-----+
| WORKER_ID | FIRST_NAME | LAST_NAME | SALARY | JOINING_DATE | DEPARTMENT |
+-----+-----+-----+-----+-----+-----+
| 001       | Monika     | Arora     | 100000 | 2021-02-20 00:00:00 | Admin       |
+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)

mysql> /*Q.20. Write an SQL query to fetch the departments that have less than five people in them.*/
mysql> select DEPARTMENT, count(WORKER_ID) NumberOfWorkers from worker group by DEPARTMENT having NumberOfWorkers<5;
+-----+-----+
| DEPARTMENT | NumberOfWorkers |
+-----+-----+
| Admin       | 2               |
| Manager     | 2               |
| HR          | 1               |
| Developer   | 1               |
| Intern      | 1               |
| Tester      | 1               |
+-----+-----+
6 rows in set (0.00 sec)

mysql> /*Q.21. Write an SQL query to show the last record from a table.*/
mysql> select*from worker order by WORKER_ID desc limit 1;
+-----+-----+-----+-----+-----+-----+
| WORKER_ID | FIRST_NAME | LAST_NAME | SALARY | JOINING_DATE | DEPARTMENT |
+-----+-----+-----+-----+-----+-----+
| 008       | Geetika    | Chauhan   | 90000  | 2021-04-11 00:00:00 | Tester      |
+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)

mysql> /*Q.22. Write an SQL query to fetch the first row of a table.*/
mysql> select * from worker limit 1;
+-----+-----+-----+-----+-----+-----+
| WORKER_ID | FIRST_NAME | LAST_NAME | SALARY | JOINING_DATE | DEPARTMENT |
+-----+-----+-----+-----+-----+-----+
| 001       | Monika     | Arora     | 100000 | 2021-02-20 00:00:00 | Admin       |
+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)

mysql> /*Q.23. Write an SQL query to fetch the last five records from a table.*/
mysql> select*from worker order by WORKER_ID desc limit 5;
+-----+-----+-----+-----+-----+-----+
| WORKER_ID | FIRST_NAME | LAST_NAME | SALARY | JOINING_DATE | DEPARTMENT |
+-----+-----+-----+-----+-----+-----+
| 008       | Geetika    | Chauhan   | 90000  | 2021-04-11 00:00:00 | Tester      |
| 007       | Satish     | Kumar     | 75000  | 2021-01-20 00:00:00 | Intern      |
| 006       | Vipul      | Diwan     | 200000 | 2021-06-11 00:00:00 | Developer   |
| 005       | Vivek      | Bhati     | 500000 | 2021-06-11 00:00:00 | HR          |
| 004       | Amitabh    | Singh     | 500000 | 2021-02-20 00:00:00 | Admin       |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> /*Q.24. Write an SQL query to fetch three max salaries from a table.*/
mysql> select*from worker order by SALARY desc limit 3;
+-----+-----+-----+-----+-----+-----+
| WORKER_ID | FIRST_NAME | LAST_NAME | SALARY | JOINING_DATE | DEPARTMENT |
+-----+-----+-----+-----+-----+-----+
| 004       | Amitabh    | Singh     | 500000 | 2021-02-20 00:00:00 | Admin       |
| 005       | Vivek      | Bhati     | 500000 | 2021-06-11 00:00:00 | HR          |
| 003       | Vishal     | Singhal   | 300000 | 2021-02-20 00:00:00 | Manager     |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)

```