**MONGO DB**

**Assignment-1**

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**Creating Table and Inserting records:**

CREATE DATABASE ORG1;

SHOW DATABASES;

USE ORG1;

CREATE TABLE Worker (

WORKER\_ID INT NOT NULL PRIMARY KEY AUTO\_INCREMENT,

FIRST\_NAME CHAR(25),

LAST\_NAME CHAR(25),

SALARY INT(15),

JOINING\_DATE DATETIME,

DEPARTMENT CHAR(25)

);

INSERT INTO Worker

(WORKER\_ID, FIRST\_NAME, LAST\_NAME, SALARY, JOINING\_DATE,

DEPARTMENT) VALUES

(001, 'Monika', 'Arora', 100000, '14-02-20

09.00.00', 'HR'),

(002, 'Niharika', 'Verma', 80000, '14-06-11

09.00.00', 'Admin'),

(003, 'Vishal', 'Singhal', 300000, '14-02-20

09.00.00', 'HR'),

(004, 'Amitabh', 'Singh', 500000, '14-02-20

09.00.00', 'Admin'),

(005, 'Vivek', 'Bhati', 500000, '14-06-11

09.00.00', 'Admin'),

(006, 'Vipul', 'Diwan', 200000, '14-06-11

09.00.00', 'Account'),

(007, 'Satish', 'Kumar', 75000, '14-01-20

09.00.00', 'Account'),

(008, 'Geetika', 'Chauhan', 90000, '14-04-11

09.00.00', 'Admin');

CREATE TABLE Bonus (

WORKER\_REF\_ID INT,

BONUS\_AMOUNT INT(10),

BONUS\_DATE DATETIME,

FOREIGN KEY (WORKER\_REF\_ID)

REFERENCES Worker(WORKER\_ID)

ON DELETE CASCADE

);

INSERT INTO Bonus

(WORKER\_REF\_ID, BONUS\_AMOUNT, BONUS\_DATE) VALUES

(001, 5000, '16-02-20'),

(002, 3000, '16-06-11'),

(003, 4000, '16-02-20'),

(001, 4500, '16-02-20'),

(002, 3500, '16-06-11');

CREATE TABLE Title (

WORKER\_REF\_ID INT,

WORKER\_TITLE CHAR(25),

AFFECTED\_FROM DATETIME,

FOREIGN KEY (WORKER\_REF\_ID)

REFERENCES Worker(WORKER\_ID)

ON DELETE CASCADE

);

INSERT INTO Title

(WORKER\_REF\_ID, WORKER\_TITLE, AFFECTED\_FROM) VALUES

(001, 'Manager', '2016-02-20 00:00:00'),

(002, 'Executive', '2016-06-11 00:00:00'),

(008, 'Executive', '2016-06-11 00:00:00'),

(005, 'Manager', '2016-06-11 00:00:00'),

(004, 'Asst. Manager', '2016-06-11 00:00:00'),

(007, 'Executive', '2016-06-11 00:00:00'),

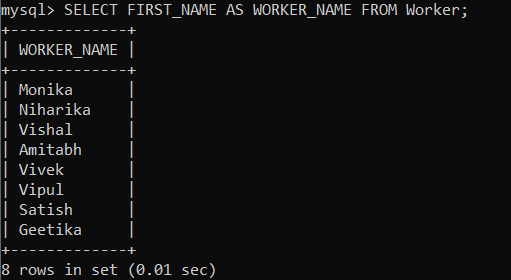
(006, 'Lead', '2016-06-11 00:00:00'),

(003, 'Lead', '2016-06-11 00:00:00');

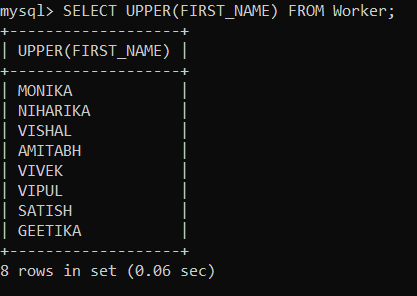
**ALTER TABLE Workers RENAME TO Workers;**

**Questions:**

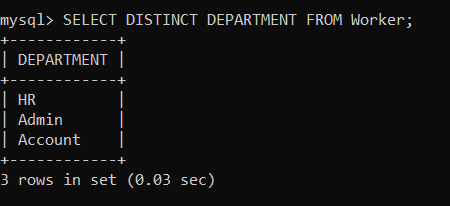
1. SELECT FIRST\_NAME AS WORKER\_NAME FROM Worker;



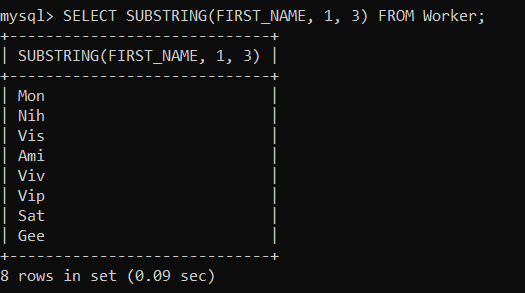
1. SELECT UPPER(FIRST\_NAME) FROM Worker;



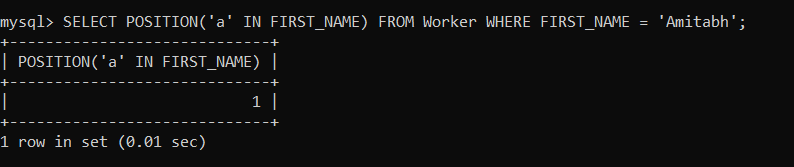
1. SELECT DISTINCT DEPARTMENT FROM Worker;



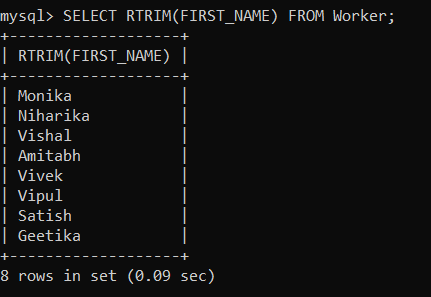
1. SELECT SUBSTRING(FIRST\_NAME, 1, 3) FROM Worker;



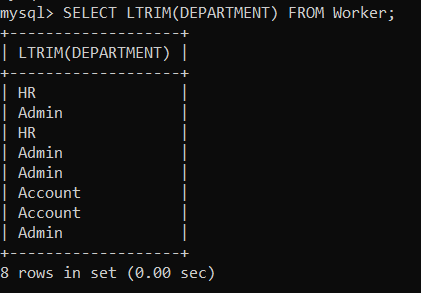
1. SELECT POSITION('a' IN FIRST\_NAME) FROM Worker WHERE FIRST\_NAME = 'Amitabh';



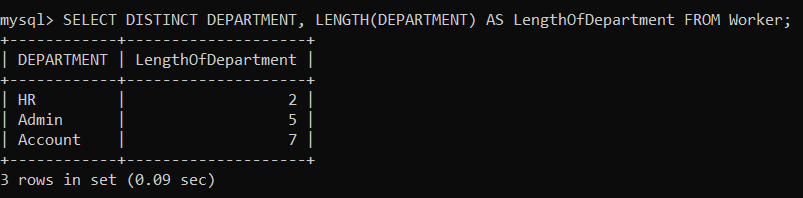
1. SELECT RTRIM(FIRST\_NAME) FROM Worker;



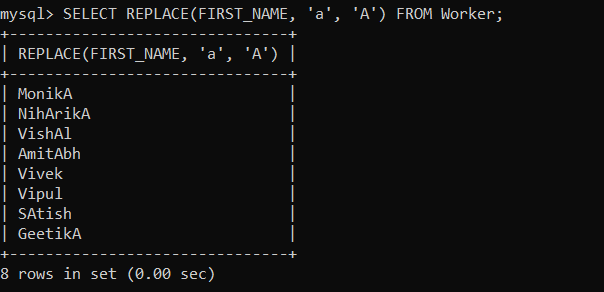
1. SELECT LTRIM(DEPARTMENT) FROM Worker;



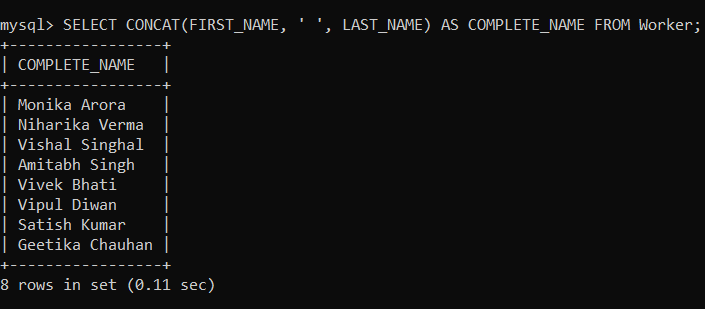
1. SELECT DISTINCT DEPARTMENT, LENGTH(DEPARTMENT) AS LengthOfDepartment FROM Worker;



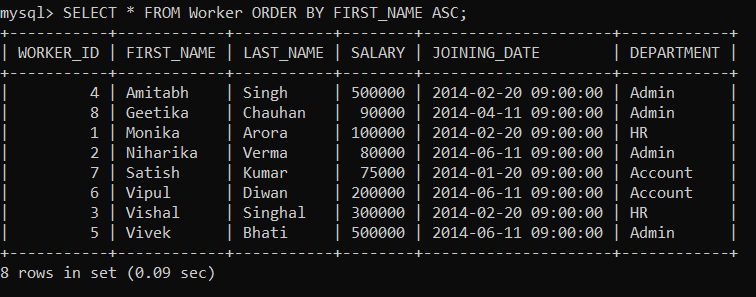
1. SELECT REPLACE(FIRST\_NAME, 'a', 'A') FROM Worker;



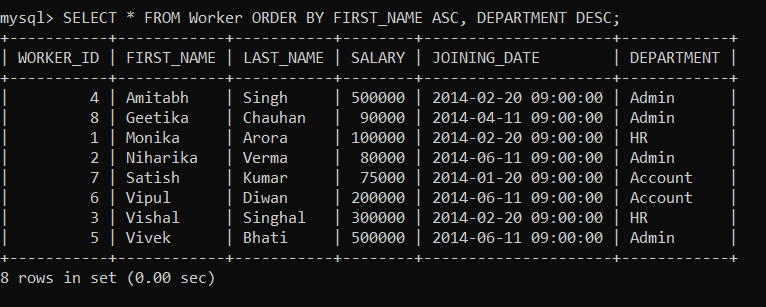
1. SELECT CONCAT(FIRST\_NAME, ' ', LAST\_NAME) AS COMPLETE\_NAME FROM Worker;



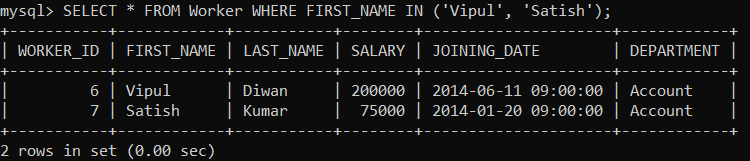
1. SELECT \* FROM Worker ORDER BY FIRST\_NAME ASC;



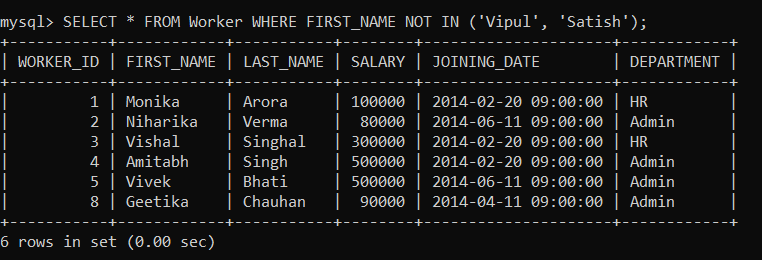
1. SELECT \* FROM Worker ORDER BY FIRST\_NAME ASC, DEPARTMENT DESC;



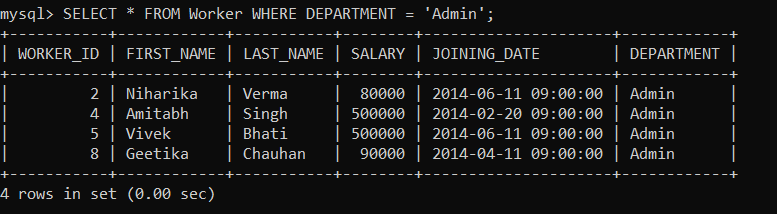
1. SELECT \* FROM Worker WHERE FIRST\_NAME IN ('Vipul', 'Satish');



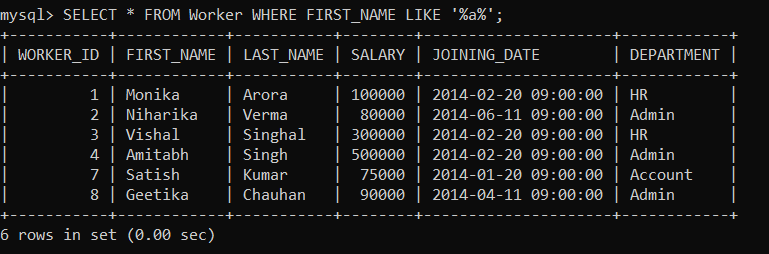
1. SELECT \* FROM Worker WHERE FIRST\_NAME NOT IN ('Vipul', 'Satish');



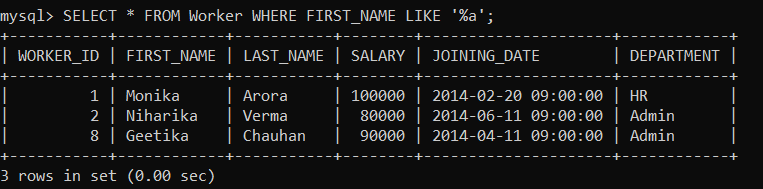
1. SELECT \* FROM Worker WHERE DEPARTMENT = 'Admin';



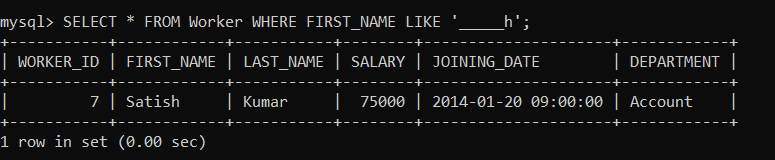
1. SELECT \* FROM Worker WHERE FIRST\_NAME LIKE '%a%';



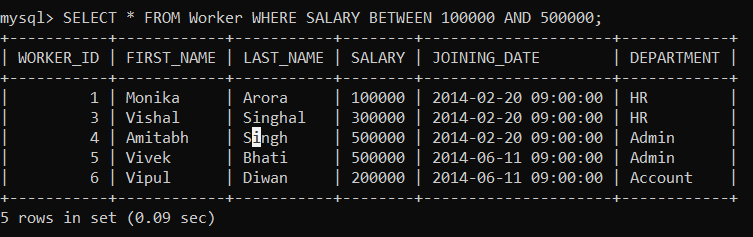
1. SELECT \* FROM Worker WHERE FIRST\_NAME LIKE '%a';

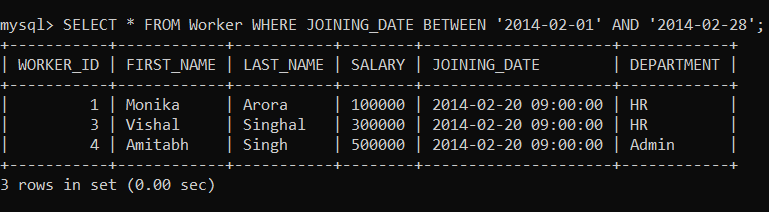


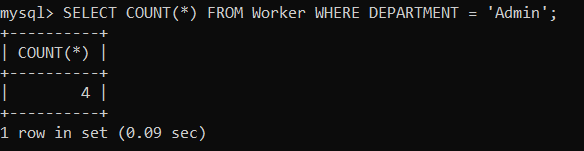
1. SELECT \* FROM Worker WHERE FIRST\_NAME LIKE '\_\_\_\_\_h';



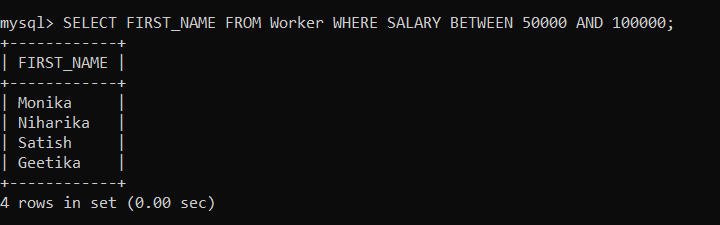
1. SELECT \* FROM Worker WHERE SALARY BETWEEN 100000 AND 500000;



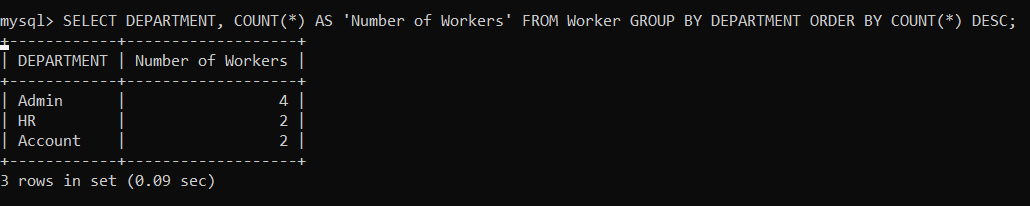
1. SELECT \* FROM Worker WHERE JOINING\_DATE BETWEEN '2014-02-01' AND '2014-02-28';
2. SELECT COUNT(\*) FROM Worker WHERE DEPARTMENT = 'Admin';



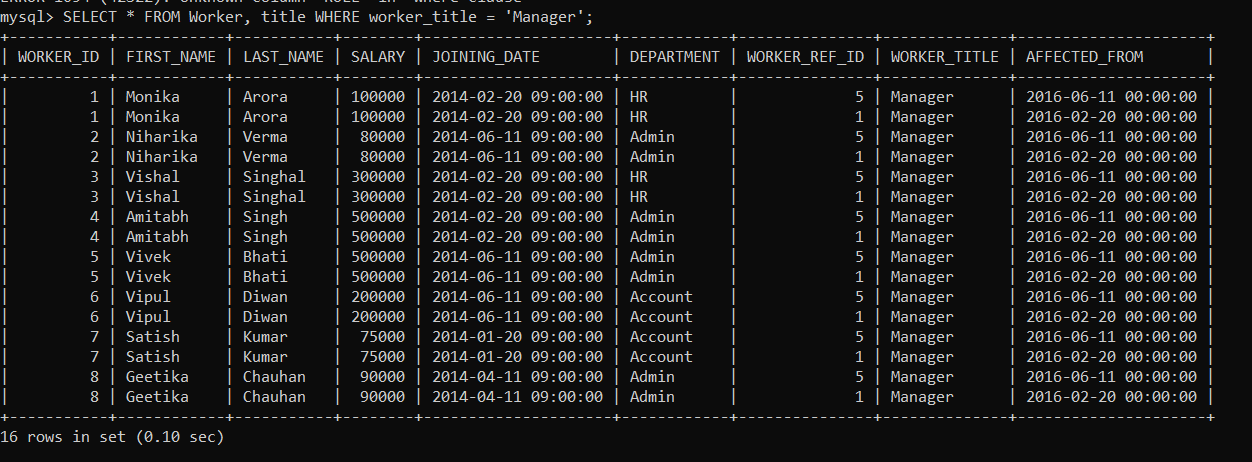
1. SELECT FIRST\_NAME FROM Worker WHERE SALARY BETWEEN 50000 AND 100000;



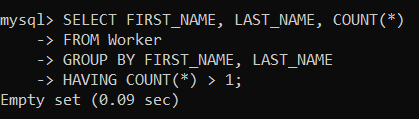
1. SELECT DEPARTMENT, COUNT(\*) AS 'Number of Workers' FROM Worker GROUP BY DEPARTMENT ORDER BY COUNT(\*) DESC;



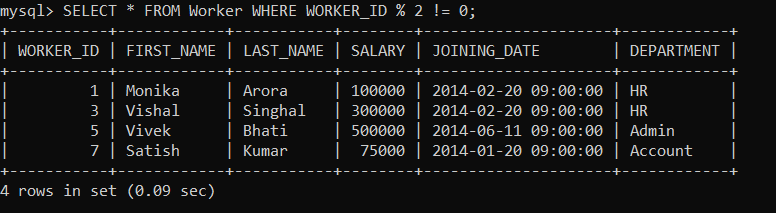
1. SELECT \* FROM Worker, title WHERE worker\_title = 'Manager';



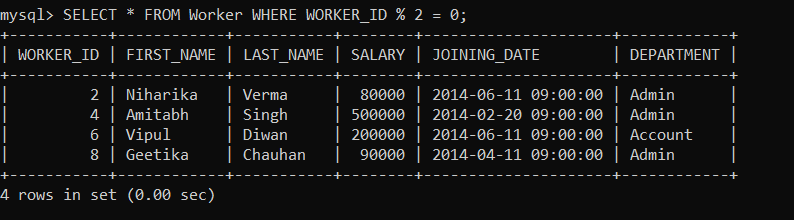
1. SELECT FIRST\_NAME, LAST\_NAME, COUNT(\*) FROM Worker GROUP BY FIRST\_NAME, LAST\_NAME HAVING COUNT(\*) > 1;



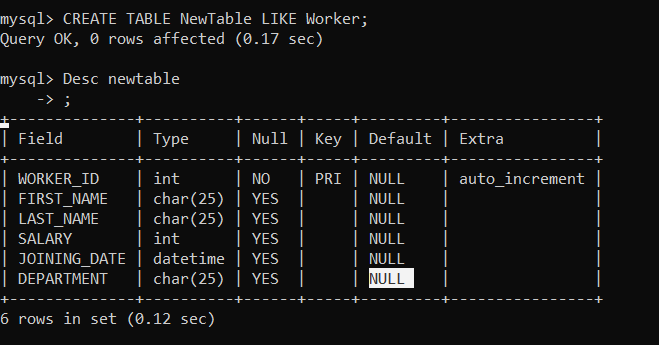
1. SELECT \* FROM Worker WHERE WORKER\_ID % 2 != 0;



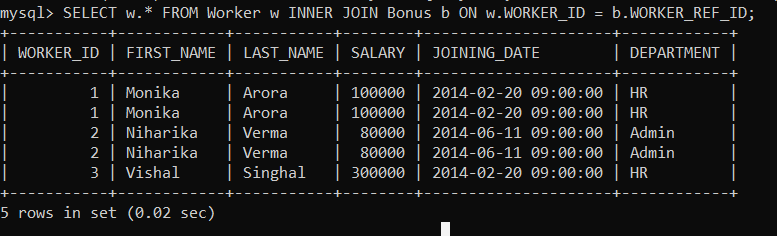
1. SELECT \* FROM Worker WHERE WORKER\_ID % 2 = 0;



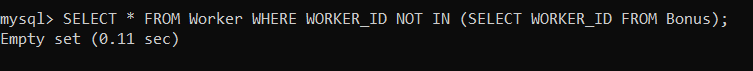
1. CREATE TABLE NewTable LIKE Worker;



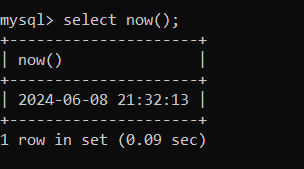
1. SELECT w.\* FROM Worker w INNER JOIN Bonus b ON w.WORKER\_ID = b.WORKER\_REF\_ID;



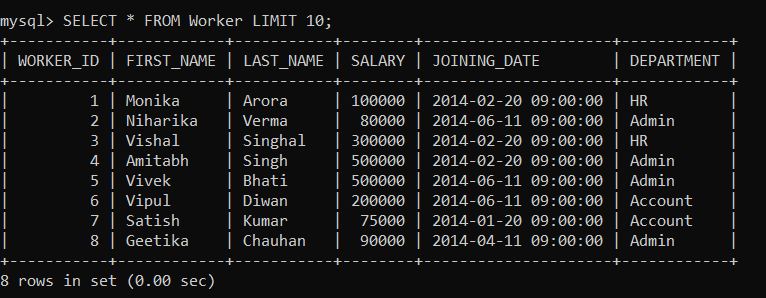
1. SELECT \* FROM Worker WHERE WORKER\_ID NOT IN (SELECT WORKER\_ID FROM Bonus);



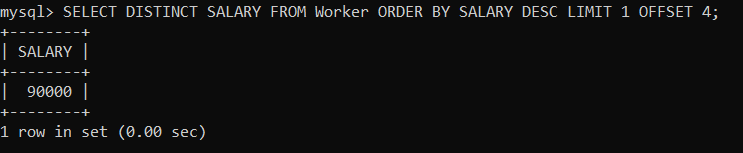
1. SELECT NOW();



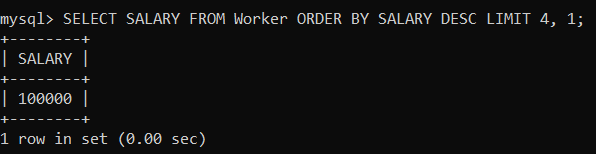
1. SELECT \* FROM Worker LIMIT 10;



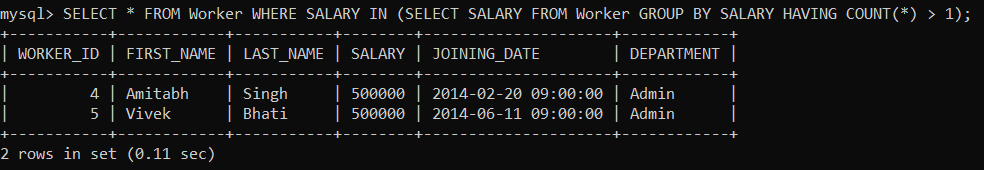
1. SELECT DISTINCT SALARY FROM Worker ORDER BY SALARY DESC LIMIT 1 OFFSET 4;



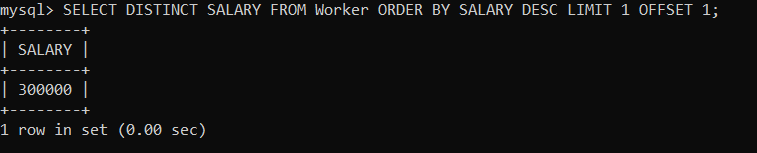
1. SELECT SALARY FROM Worker ORDER BY SALARY DESC LIMIT 4, 1;



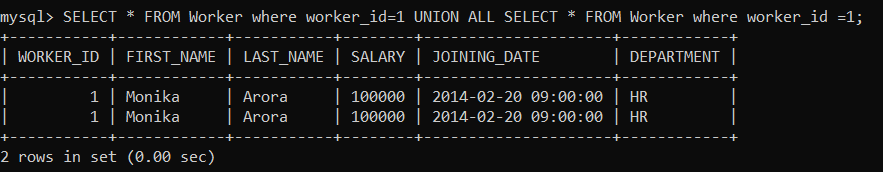
1. SELECT \* FROM Worker WHERE SALARY IN (SELECT SALARY FROM Worker GROUP BY SALARY HAVING COUNT(\*) > 1);



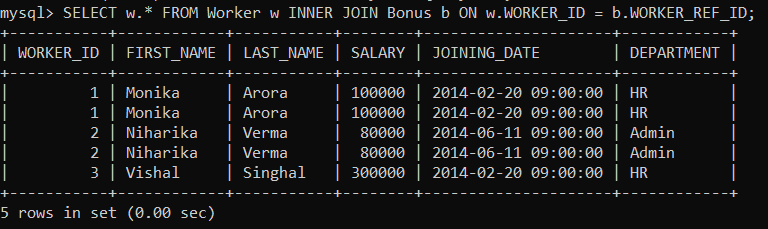
1. SELECT DISTINCT SALARY FROM Worker ORDER BY SALARY DESC LIMIT 1 OFFSET 1;



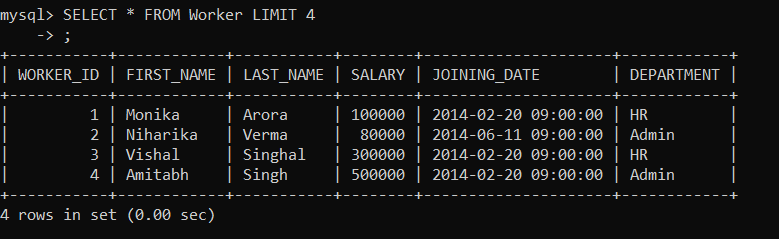
1. SELECT \* FROM Worker where worker\_id=1 UNION ALL SELECT \* FROM Worker where worker\_id =1;



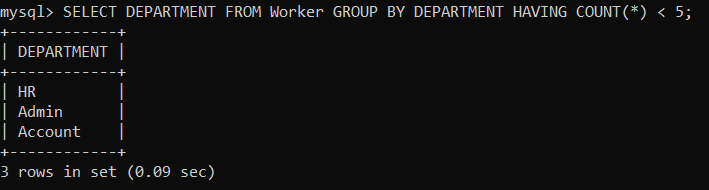
1. SELECT w.\* FROM Worker w INNER JOIN Bonus b ON w.WORKER\_ID = b.WORKER\_REF\_ID;



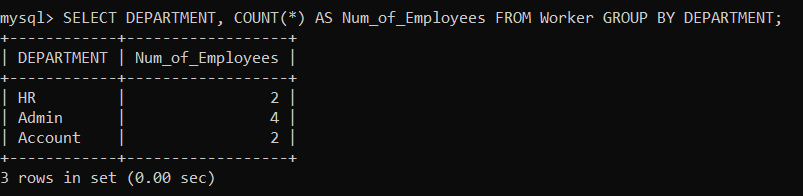
1. SELECT \* FROM Worker LIMIT 4;



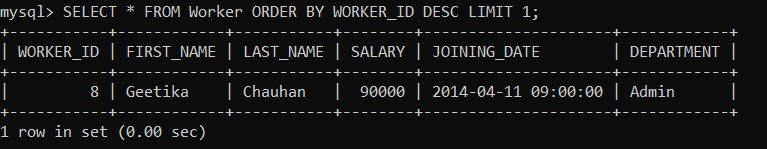
1. SELECT DEPARTMENT FROM Worker GROUP BY DEPARTMENT HAVING COUNT(\*) < 5;



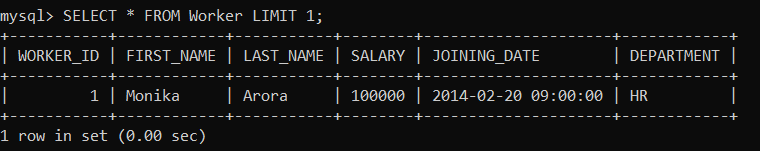
1. SELECT DEPARTMENT, COUNT(\*) AS Num\_of\_Employees FROM Worker GROUP BY DEPARTMENT;



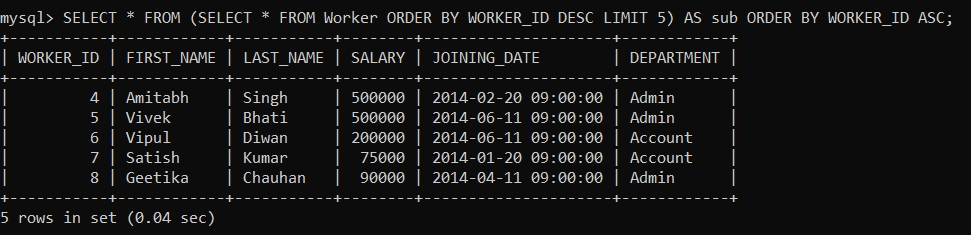
1. SELECT \* FROM Worker ORDER BY WORKER\_ID DESC LIMIT 1;



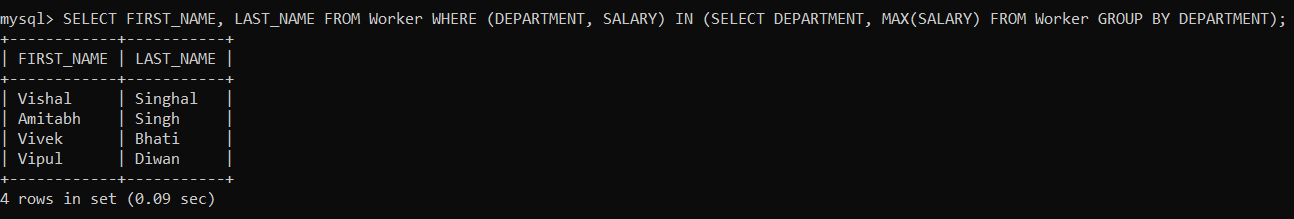
1. SELECT \* FROM Worker LIMIT 1;



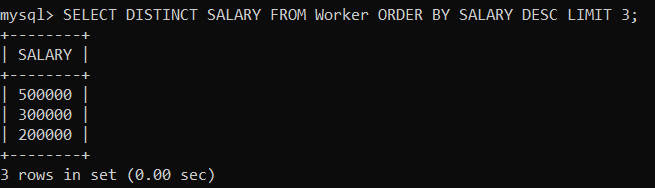
1. SELECT \* FROM (SELECT \* FROM Worker ORDER BY WORKER\_ID DESC LIMIT 5) AS sub ORDER BY WORKER\_ID ASC;



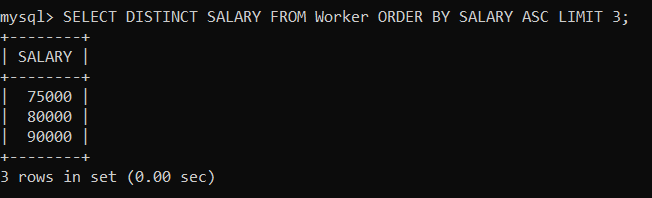
1. SELECT FIRST\_NAME, LAST\_NAME FROM Worker WHERE (DEPARTMENT, SALARY) IN (SELECT DEPARTMENT, MAX(SALARY) FROM Worker GROUP BY DEPARTMENT);



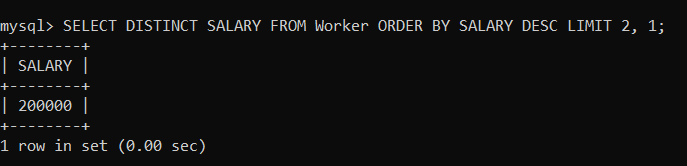
1. SELECT DISTINCT SALARY FROM Worker ORDER BY SALARY DESC LIMIT 3;



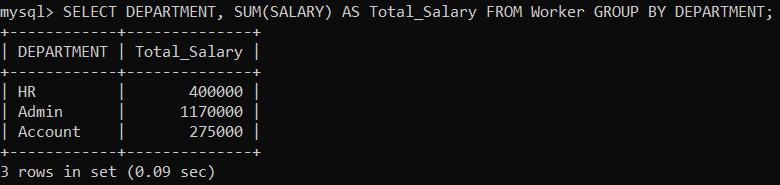
1. SELECT DISTINCT SALARY FROM Worker ORDER BY SALARY ASC LIMIT 3;



1. SELECT DISTINCT SALARY FROM Worker ORDER BY SALARY DESC LIMIT 2, 1;



1. SELECT DEPARTMENT, SUM(SALARY) AS Total\_Salary FROM Worker GROUP BY DEPARTMENT;



1. SELECT FIRST\_NAME, LAST\_NAME FROM Worker WHERE SALARY = (SELECT MAX(SALARY) FROM Worker);

