MYSQL Project

CREATE DATABASE project;

USE project;

Creating Three Tables:

- Worker Info
- Bonus
- Title

Create Worker Info Table

```
CREATE TABLE Worker_Info(
Worker_Id INT NOT NULL AUTO_INCREMENT PRIMARY KEY,
First_Name VARCHAR(255),
Last_Name VARCHAR(255),
Salary BIGINT(20),
DateOfJoining DATETIME,
Department CHAR(25)
);
INSERT INTO Worker_Info (Worker_Id, First_Name, Last_Name, Salary,
DateOfJoining, Department) VALUES
(001, 'Monika', 'Arora', '100000', '2014-02-20 09:00:00', 'HR'),
(002, 'Niharika', 'Verma', '80000', '2014-06-11 09:00:00', 'Admin'),
(003, 'Vishal', 'Singhal', '300000', '2014-02-20 09:00:00', 'HR'),
(004, 'Amitabh', 'Singh', '500000', '2014-02-20 09:00:00', 'Admin'),
(005, 'Vivek', 'Bhati', '500000', '2014-06-11 09:00:00', 'Admin'),
(006, 'Vipul', 'Diwan', '200000', '2014-06-11 09:00:00', 'Account'),
(007, 'Satish', 'Kumar', '75000', '2014-01-20 09:00:00', 'Account'),
(008, 'Geetika', 'Chauhan', '90000', '2014-04-11 09:00:00', 'Admin');
```

SELECT * FROM Worker_Info;

Output:

Re	sult Grid	♦ Filter R	lows:		Edit: 🔏 🖶 🖶	Export/Import:		Ō.	Wrap Cell Content:	<u>‡A</u>
	Worker_Id	First_Name	Last_Name	Salary	DateOfJoining	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				
	5	Vivek	Bhati	500000	2014-06-11 09:00:00	Admin				
	6	Vipul	Diwan	200000	2014-06-11 09:00:00	Account				
	7	Satish	Kumar	75000	2014-01-20 09:00:00	Account				
	8	Geetika	Chauhan	90000	2014-04-11 09:00:00	Admin				
	NULL	NULL	NULL	NULL	HULL	NULL				

Create Bonus Table

```
CREATE TABLE Bonus(
```

Worker_Ref_Id INT,

Bonus_Date DATETIME,

Bonus_Amount BIGINT(15),

FOREIGN KEY(Worker_Ref_Id)

REFERENCES Worker_Info(Worker_Id)

ON DELETE CASCADE

);

INSERT INTO Bonus (Worker_Ref_Id, Bonus_Date, Bonus_Amount) VALUES

- (1, '2016-02-20 00:00:00', '5000'),
- (2, '2016-06-11 00:00:00', '3000'),
- (3, '2016-02-20 00:00:00', '4000'),
- (1,'2016-02-20 00:00:00', '4500'),
- (2, '2016-06-11 00:00:00', '3500');

SELECT * FROM Bonus;

Output:

Result Grid							
	Worker_Ref_Id	Bonus_Date	Bonus_Amount				
•	1	2016-02-20 00:00:00	5000				
	2	2016-06-11 00:00:00	3000				
	3	2016-02-20 00:00:00	4000				
	1	2016-02-20 00:00:00	4500				
	2	2016-06-11 00:00:00	3500				

Create Title Table

CREATE TABLE Title(

Worker_Ref_Id INT,

Worker_Title VARCHAR(50),

Affected_From DATETIME,

FOREIGN KEY (Worker_Ref_Id)

REFERENCES Worker_Info (Worker_Id)

ON DELETE CASCADE

);

INSERT INTO Title (Worker_Ref_Id, Worker_Title, Affected_From) VALUES

- (1,'Manager', '2016-02-20 00:00:00'),
- (2, 'Executive', '2016-06-11 00:00:00'),
- (8, 'Executive', '2016-06-11 00:00:00'),
- (5, 'Manager', '2016-06-11 00:00:00'),
- (4, 'Asst.Manager', '2016-06-11 00:00:00'),
- (7, 'Executive', '2016-06-11 00:00:00'),
- (6, 'Lead', '2016-06-11 00:00:00'),
- (3, 'Lead', '2016-06-11 00:00:00');

SELECT * FROM Title;

Output:

Re	sult Grid 📗 🐧	Filter Rows:	Expor	t:	Wrap Cell Content:	<u>‡A</u>
	Worker_Ref_Id	Worker_Title	Affected_From			
•	1	Manager	2016-02-20 00:00:00			
	2	Executive	2016-06-11 00:00:00			
	8	Executive	2016-06-11 00:00:00			
	5	Manager	2016-06-11 00:00:00			
	4	Asst.Manager	2016-06-11 00:00:00			
	7	Executive	2016-06-11 00:00:00			
	6	Lead	2016-06-11 00:00:00			
	3	Lead	2016-06-11 00:00:00			

Q-1. Write an SQL query to fetch "FIRST_NAME" from Worker table using the alias name as <WORKER_NAME>.

Query

SELECT First_Name AS WORKER_NAME FROM Worker_Info;



Q-2. Write an SQL query to fetch "FIRST NAME" from Worker table in upper case.

Query

SELECT UPPER(First_Name) FROM Worker_Info;



Q-3. Write an SQL query to fetch unique values of DEPARTMENT from Worker table.

Query

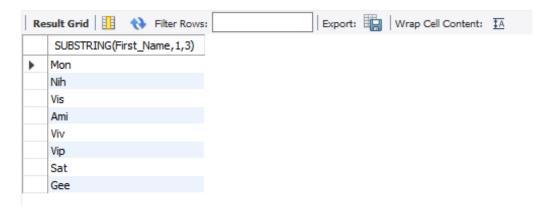
SELECT DISTINCT Department FROM Worker_Info;



Q-4. Write an SQL query to print the first three characters of FIRST_NAME from Worker table

Query

SELECT SUBSTRING(First_Name, 1, 3) FROM Worker_Info;



Q-5. Write an SQL query to find the position of the alphabet ('a') in the first name column 'Amitabh' from Worker table

Query

SELECT INSTR(First_Name, BINARY"a") FROM Worker_Info WHERE First_Name = "Amitabh";



Q-6. Write an SQL query to print the FIRST_NAME from Worker table after removing white spaces from the right side.

Query

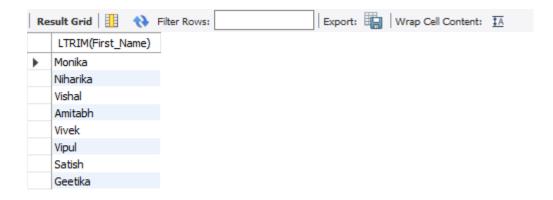
SELECT RTRIM(First_Name) FROM Worker_Info;



Q-7. Write an SQL query to print the DEPARTMENT from Worker table after removing white spaces from the left side.

Query

SELECT LTRIM(First_Name) FROM Worker_Info;



Q-8. Write an SQL query that fetches the unique values of DEPARTMENT from Worker table and prints its length.

Query

SELECT DISTINCT(LENGTH (Department)) FROM Worker_Info;



Q-9. Write an SQL query to print the FIRST_NAME from Worker table after replacing 'a' with 'A'.

Query

SELECT REPLACE(First_Name, 'a', 'A') FROM Worker_Info;



Q-10. Write an SQL query to print the FIRST_NAME and LAST_NAME from Worker table into a single column COMPLETE_NAME. A space char should separate them.

Query

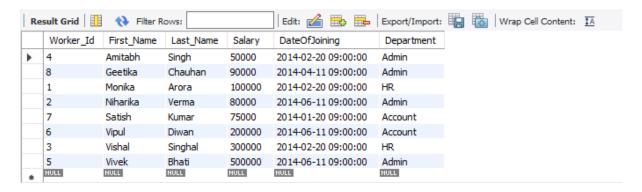
SELECT CONCAT(First_Name," ",Last_Name) AS COMPLETE_NAME FROM Worker_Info;



Q-11. Write an SQL query to print all Worker details from the Worker table order by FIRST_NAME Ascending.

Query

SELECT * FROM Worker_Info ORDER BY First_Name;



Q-12. Write an SQL query to print all Worker details from the Worker table order by FIRST_NAME Ascending and DEPARTMENT Descending.

Query

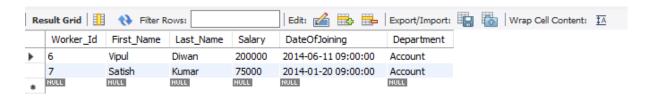
SELECT * FROM Worker_Info ORDER BY First_Name ASC, Department DESC;

Res	sult Grid 🔢	Filter R	lows:		Edit: 🚣 🖶 🖶	Export/Import:	⊕	Wrap Cell Co	ntent:	<u>‡A</u>
	Worker_Id	First_Name	Last_Name	Salary	DateOfJoining	Department				
	4	Amitabh	Singh	50000	2014-02-20 09:00:00	Admin				
	8	Geetika	Chauhan	90000	2014-04-11 09:00:00	Admin				
•	1	Monika	Arora	100000	2014-02-20 09:00:00	HR				
	2	Niharika	Verma	80000	2014-06-11 09:00:00	Admin				
	7	Satish	Kumar	75000	2014-01-20 09:00:00	Account				
	6	Vipul	Diwan	200000	2014-06-11 09:00:00	Account				
	3	Vishal	Singhal	300000	2014-02-20 09:00:00	HR				
	5	Vivek	Bhati	500000	2014-06-11 09:00:00	Admin				
	NULL	NULL	NULL	NULL	HULL	NULL				

Q-13. Write an SQL query to print details for Workers with the first name as "Vipul" and "Satish" from Worker table.

Query

SELECT * FROM Worker_Info WHERE First_Name IN ('Vipul', 'Satish');



Q-14. Write an SQL query to print details of workers excluding first names, "Vipul" and "Satish" from Worker table.

Query

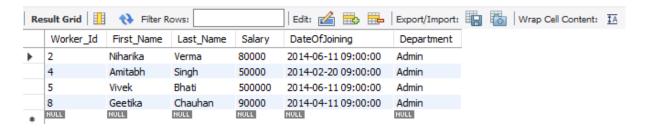
SELECT * FROM Worker_Info WHERE NOT First_Name IN ('Vipul', 'Satish');



Q-15. Write an SQL query to print details of Workers with DEPARTMENT name as "Admin".

Query

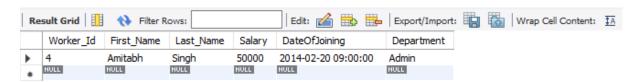
SELECT * FROM Worker_Info WHERE Department = 'Admin';



Q-16. Write an SQL query to print details of the Workers whose FIRST_NAME contains 'a'.

Query

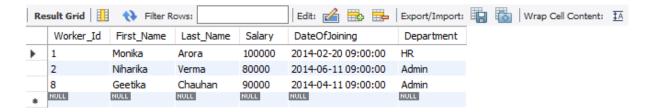
SELECT * FROM Worker_Info WHERE First_Name LIKE'a%';



Q-17. Write an SQL query to print details of the Workers whose FIRST_NAME ends with 'a'.

Query

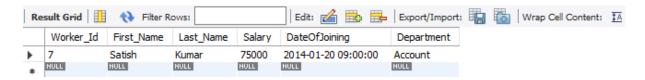
SELECT * FROM Worker_Info WHERE First_Name LIKE'%a';



Q-18. Write an SQL query to print details of the Workers whose FIRST_NAME ends with 'h' and contains six alphabets.

Query

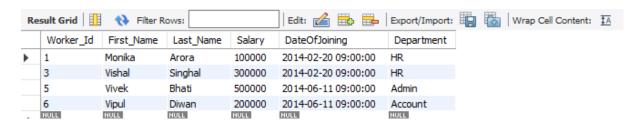
SELECT * FROM Worker_Info WHERE LENGTH(First_Name) = 6 AND First_Name LIKE'%h';



Q-19. Write an SQL query to print details of the Workers whose SALARY lies between 100000 and 500000.

Query

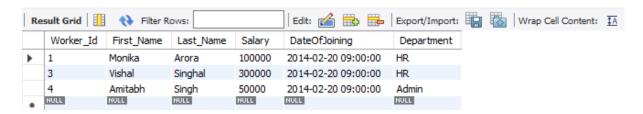
SELECT * FROM Worker_Info WHERE Salary BETWEEN 100000 AND 500000;



Q-20. Write an SQL query to print details of the Workers who have joined in Feb'2014.

Query

SELECT * FROM Worker_Info WHERE DateOfJoining LIKE '2014-02%';



Q-21. Write an SQL query to fetch the count of employees working in the department 'Admin'.

Query

SELECT COUNT(Department) FROM Worker_Info WHERE Department = 'Admin';



Q-22. Write an SQL query to fetch worker names with salaries >= 50000 and <= 100000.

Query

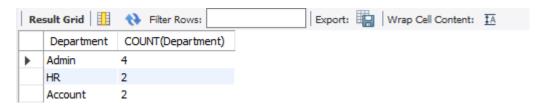
SELECT CONCAT (First_Name,' ',Last_Name) AS FullName, Salary FROM Worker_Info WHERE Salary BETWEEN '50000' AND '100000';



Q-23. Write an SQL query to fetch the no. of workers for each department in the descending order.

Query

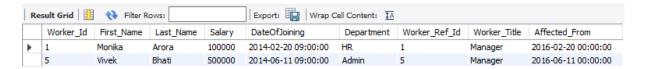
SELECT Department, COUNT(Department) FROM Worker_Info GROUP BY Department ORDER BY COUNT(Department) DESC;



Q-24. Write an SQL query to print details of the Workers who are also Managers.

Query

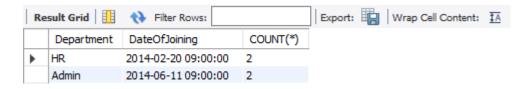
SELECT * FROM Worker_Info t1 INNER JOIN Title t2 ON t1.Worker_Id = t2.Worker_Ref_Id WHERE Worker_Title = 'Manager';



Q-25. Write an SQL query to fetch duplicate records having matching data in some fields of a table.

Query

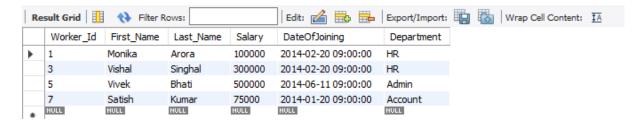
SELECT Department, DateOfJoining, COUNT(*) FROM Worker_Info GROUP BY Department, DateOfJoining HAVING COUNT(*)>1;



Q-26. Write an SQL query to show only odd rows from a table.

Query

SELECT * FROM Worker_Info WHERE MOD(Worker_Id, 2) <> 0; SELECT * FROM Worker_Info WHERE Worker_Id %2!= 0;



Q-27. Write an SQL query to show only even rows from a table.

Query

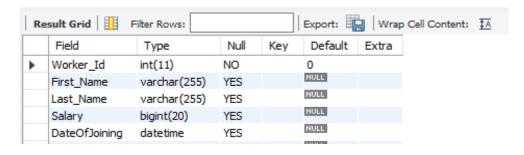
SELECT * FROM Worker_Info WHERE MOD(Worker_Id, 2) = 0; SELECT * FROM Worker_Info WHERE Worker_Id %2= 0;



Q-28. Write an SQL query to clone a new table from another table.

Query

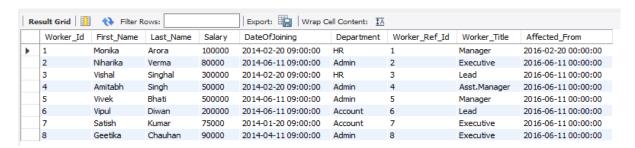
CREATE TABLE Duplicate_Table Select * FROM Worker_Info; DESCRIBE Duplicate_Table;



Q-29. Write an SQL query to fetch intersecting records of two tables.

Query

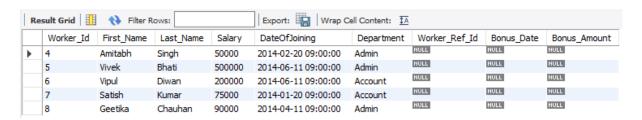
SELECT * FROM Worker_Info t1 INNER JOIN Title t2 ON t1.Worker_Id = t2.Worker_Ref_Id;



Q-30. Write an SQL query to show records from one table that another table does not have.

Query

SELECT * FROM Worker_Info t1 LEFT JOIN Bonus t2 ON t1.Worker_Id = t2.Worker_Ref_Id WHERE t2.Worker_Ref_Id IS NULL;



Q-31. Write an SQL query to show the current date and time.

Query

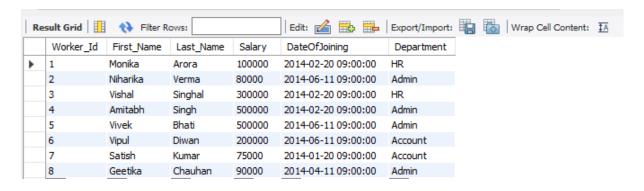
SELECT NOW();



Q-32. Write an SQL query to show the top n (say 10) records of a table.

Query

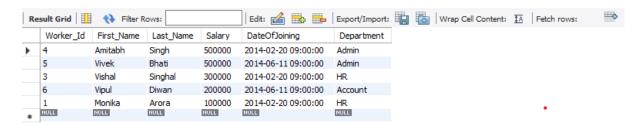
SELECT * FROM Worker_Info LIMIT 10;



Q-33. Write an SQL query to determine the nth (say n=5) highest salary from a table.

Query

SELECT * FROM Worker_Info ORDER BY Salary DESC LIMIT 5;



Q-34. Write an SQL query to determine the 5th highest salary without using TOP or limit method.

Query

SELECT Salary FROM Worker_Info W1
WHERE 4 = (SELECT COUNT (DISTINCT (W2.Salary))
FROM Worker_Info W2
WHERE W2.Salary >= W1.Salary

);



Q-35. Write an SQL query to fetch the list of employees with the same salary.

Query

SELECT W.Worker_Id, W.First_Name, W.Salary FROM Worker_Info W, Worker_Info W1 WHERE W.Salary = W1.Salary AND W.Worker_Id != W1.Worker_Id;



Q-36. Write an SQL query to show the second highest salary from a table.

Query

Q-37. Write an SQL query to show one row twice in results from a table.

Query

SELECT First_Name, Department FROM Worker_Info WHERE Department = 'HR' UNION ALL

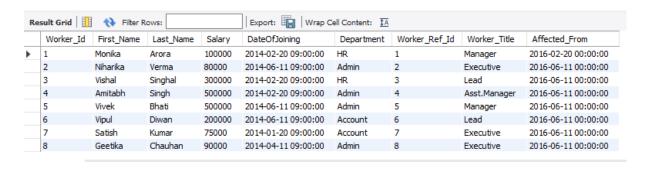
SELECT First_Name, Department FROM Worker_Info WHERE Department = 'HR';



Q-38. Write an SQL query to fetch intersecting records of two tables.

Query

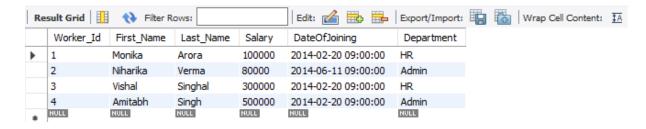
SELECT * FROM Worker_Info t1
INNER JOIN Title t2
ON t1.Worker_Id = t2.Worker_Ref_Id;



Q-39. Write an SQL query to fetch the first 50% records from a table.

Query

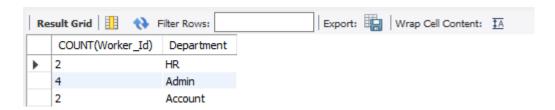
SELECT * FROM Worker_Info
WHERE Worker_Id <= (SELECT round(count(Worker_Id)/2,0) FROM
Worker_Info);



Q-40. Write an SQL query to fetch the departments that have less than five people in it.

Query

SELECT COUNT(Worker_Id), Department FROM Worker_Info GROUP BY Department HAVING COUNT(Worker_Id) < 5;



Q-41. Write an SQL query to show all departments along with the number of people in there.

Query

SELECT COUNT(Worker_Id), Department FROM Worker_Info GROUP BY Department HAVING COUNT(Worker_Id);



Q-42. Write an SQL query to show the last record from a table.

Query

SELECT * FROM Worker Info ORDER BY Worker Id DESC LIMIT 1;



Q-43. Write an SQL query to fetch the first row of a table.

Query

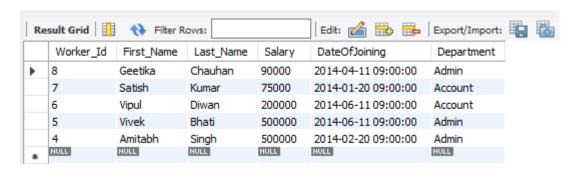
SELECT * FROM Worker_Info ORDER BY Worker_Id LIMIT 1;



Q-44. Write an SQL query to fetch the last five records from a table.

Query

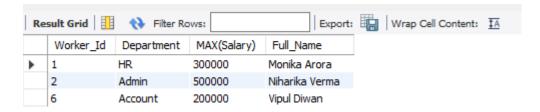
SELECT * FROM Worker_Info ORDER BY Worker_Id DESC LIMIT 5;



Q-45. Write an SQL query to print the name of employees having the highest salary in each department.

Query

SELECT Worker_Id, Department, MAX(Salary), CONCAT(First_Name, '', Last_Name) AS Full_Name From Worker_Info GROUP BY Department;



Q-46. Write an SQL query to fetch three max salaries from a table.

Query

SELECT Salary FROM Worker_Info ORDER BY Salary DESC LIMIT 3;



Q-47. Write an SQL query to fetch three min salaries from a table.

Query

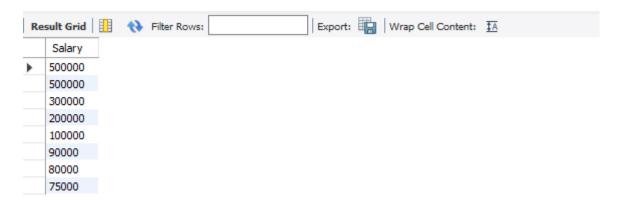
SELECT Salary FROM Worker_Info ORDER BY Salary LIMIT 3;



Q-48. Write an SQL query to fetch nth max salaries from a table.

Query

SELECT Salary FROM Worker_Info ORDER BY Salary DESC;



Q-49. Write an SQL query to fetch departments along with the total salaries paid for each of them.

Query

SELECT Department, SUM(Salary) FROM Worker_Info GROUP BY Department;



Q-50. Write an SQL query to fetch the names of workers who earn the highest salary.

Query

SELECT CONCAT(First_Name, '', Last_Name) AS Full_Name, Salary FROM Worker_Info WHERE Salary = (SELECT MAX(Salary) FROM Worker_Info);

