CREATE DATABASE ORG;

SHOW DATABASES;

USE ORG;

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'),

(009, 'Akash', 'Ram', 100000, '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');

**Q-1. Write an SQL query to fetch “FIRST\_NAME” from Worker table using the alias name as <WORKER\_NAME>.**

**Ans.**

The required query is:

**Q-2. Write an SQL query to fetch “FIRST\_NAME” from Worker table in upper case.**

**Ans.**

The required query is:

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

**Ans.**

The required query is:

**Q-4. Write an SQL query to print the first three characters of  FIRST\_NAME from Worker table.**

**Ans.**

The required query is:

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

**Ans.**

The required query is:

**Notes.**

* The INSTR method is in case-sensitive by default.
* Using Binary operator will make INSTR work as the case-sensitive function.

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

**Ans.**

The required query is:

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

**Ans.**

The required query is:

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

**Ans.**

The required query is:

#### Q-9. Write an SQL query to print the FIRST\_NAME from Worker table after replacing ‘a’ with ‘A’.

**Ans.**

The required query is:

#### 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.

**Ans.**

The required query is:

#### Q-11. Write an SQL query to print all Worker details from the Worker table order by FIRST\_NAME Ascending.

**Ans.**

The required query is:

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

**Ans.**

The required query is:

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

**Ans.**

The required query is:

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

**Ans.**

The required query is:

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

**Ans.**

The required query is:

#### Q-16. Write an SQL query to print details of the Workers whose FIRST\_NAME contains ‘a’.

**Ans.**

The required query is:

#### Q-17. Write an SQL query to print details of the Workers whose FIRST\_NAME ends with ‘a’.

**Ans.**

The required query is:

#### Q-18. Write an SQL query to print details of the Workers whose FIRST\_NAME ends with ‘h’ and contains six alphabets.

**Ans.**

The required query is:

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

**Ans.**

The required query is:

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

**Ans.**

The required query is:

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

**Ans.**

The required query is:

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

**Ans.**

The required query is:

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

**Ans.**

The required query is:

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

**Ans.**

The required query is:

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

**Ans.**

The required query is:

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

**Ans.**

The required query is:

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

**Ans.**

The required query is:

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

**Ans.**

The general query to clone a table with data is:

The general way to clone a table without information is:

An alternate way to clone a table (for MySQL) without is:

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

**Ans.**

The required query is:

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

**Ans.**

The required query is:

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

**Ans.**

Following MySQL query returns the current date:

Following MySQL query returns the current date and time:

Following SQL Server query returns the current date and time:

Following Oracle query returns the current date and time:

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

**Ans.**

Following MySQL query will return the top n records using the LIMIT method:

Following SQL Server query will return the top n records using the TOP command:

Following Oracle query will return the top n records with the help of ROWNUM:

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

**Ans.**

The following MySQL query returns the nth highest salary:

The following SQL Server query returns the nth highest salary:

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

**Ans.**

The following query is using the correlated subquery to return the 5th highest salary:

Use the following generic method to find nth highest salary without using TOP or limit.

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

**Ans.**

The required query is:

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

**Ans.**

The required query is:

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

**Ans.**

The required query is:

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

**Ans.**

The required query is:

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

**Ans.**

The required query is:

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

**Ans.**

The required query is:

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

**Ans.**

The following query returns the expected result:

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

**Ans.**

The following query will return the last record from the Worker table:

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

**Ans.**

The required query is:

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

**Ans.**

The required query is:

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

**Ans.**

The required query is:

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

**Ans.**

The required query is:

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

**Ans.**

The required query is:

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

**Ans.**

The required query is:

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

**Ans.**

The required query is:

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

**Ans.**

The required query is: