

SQL QUERY

(1) Write query to see list of tables in database?

➤ **SHOW TABLES;**

(2) Write query to read all the data from the tables?

➤ **SELECT* FROM TABLE NAME;**

(3) Write query to read only employee id and name?

➤ **SELECT ID,NAME FROM TABLE NAME;**

GOLDEN/GROUND RULES STRUCTURE OF SQL

SELECT->FROM->WHERE->GROUP BY->HAVING->ORDER BY

(1) Read all employees name whose salary is 7000?

➤ **SELECT NAME FROM EMPLOYEE WHERE SALARY=7000;**

(2) Give the employee name whose salary is equal or greater than 7000?

➤ **SELECT NAME FROM EMPLOYEE WHERE SALARY>=7000;**

(3) Give me Employee name whose salary is 2000 and 5000?

➤ **SELECT NAME FROM EMPLOYEE WHERE IN(2000,5000);**

(4) Give me the employee id whose name is sahil and Rahul?

➤ **SELECT ID FROM EMPLOYEE WHERE NAME IN ("SAHIL","RAHUL");**

(5) Sort the employee name in ascending order?

➤ **SELECT NAME FROM EMPLOYEE ORDER BY NAME ASC;**

(6) Sort the employee name in descending order?

➤ **SELECT NAME FROM EMPLOYEE ORDER BY NAME DESC;**

BUILT-IN FUNCTION

(1) Give me the maximum salary from the table?

➤ **SELECT MAX(SALARY) FROM EMPLOYEE;**

(2) Give me the minimum salary from the table?

➤ **SELECT MIN(SALARY) FROM EMPLOYEE;**

(3) Give the average of all the salaries?

➤ **SELECT AVG(SALARY) FROM EMPLOYEE;**

(4) Give me the sum of all the salaries?

➤ **SELECT SUM(SALARY) FROM EMPLOYEE;**

(5) Count the number of employee in your company?

➤ **SELECT COUNT(ID) FROM EMPLOYEE;**

(6) Count the number of employee only city wise?

➤ **SELECT COUNT(ID),CITY_NAME FROM EMPLOYEE GROUP BY CITY_NAME;**

(7) Count the number of employee name wise and city wise both ?

➤ **SELECT COUNT(ID),NAME,CITY_NAME FROM EMPLOYEE GROUP BY NAME,CITY_NAME;**

(8) Group the employee based on city and then count city wise and print the count in ascending order?

➤ **SELECT COUNT(ID),CITY FROM EMPLOYEE GROUP BY CITY ORDER BY COUNT(ID) ASC;**

(9) Count number of cities and sort the count in ascending order then group by cities?

➤ **SELECT COUNT(CITY) FROM EMPLOYEE GROUP BY CITY ORDER BY COUNT(CITY) ASC;**

- (10) Group the candidates based on their age?
- **SELECT COUNT(AGE) FROM EMPLOYEE GROUP BY AGE;**
- (11) convert all the employee name in upper case?
- **SELECT UCASE(NAME) FROM EMPLOYEE;**
- (12) Convert all the employee name in lower case?
- **SELECT LCASE(NAME) FROM EMPLOYEE;**
- (13) Give me top 2 record?
- **SELECT * FROM EMPLOYEE ORDER BY ASC LIMIT 2;**
- (14) Give me only the first record from the table?
- **SELECT* FROM EMPLOYEE ORDER BY ASC LIMIT 1;**
- (15) Give me the last two record from the table?
- **SELECT* FROM EMPLOYEE ORDER BY DESC LIMIT 2;**
- (16) Print current system time using sql?
- **SELECT NOW();**

WILD CARDS

- (1) Give me the name ends with m?
- **SELECT NAME FROM EMPLOYEE WHERE NAME LIKE '%M';**
- (2) Give me the name of the employee which consist of letter m?
- **SELECT NAME FROM EMPLOYEE WHERE NAME LIKE '%M%';**
- (3) Give me the employee name that starts with letter s?
- **SELECT NAME FROM EMPLOYEE LIKE 'S%';**
- (4) Give me the name of the employee which consists of 4 letters ?

- **SELECT NAME FROM EMPLOYEE WHERE NAME LIKE '____';**
(5) Give me the name of the employee which consists of 5 letters?
- **SELECT NAME FROM EMPLOYEE WHERE NAME LIKE '____L';**
(6) Give me the name of the employee ends with letter L and which consists of 5 letters?
- **SELECT NAME FROM EMPLOYEE WHERE NAME LIKE '____L';**

CRUD OPERATION COMMAND

ADD

- (1) Add a column to the existing table?
- **ALTER TABLE EMPLOYEE ADD EMAIL VARCHAR(45);**
(2) At a column at first position?
- **ALTER TABLE EMPLOYEE ADD EMAIL VARCHAR(45) FIRST;**
(3) Add the column email after name column?
- **ALTER TABLE EMPLOYEE ADD EMAIL VARCHAR(45) AFTER NAME;**

UPDATE

- (1) Update the record where employee name is afan to sahil..?
- **UPDATE EMPLOYEE SET NAME='SAHIL' WHERE NAME='AFAN';**
(2) Update employee name sahil to rana where id is 107?
- **UPDATE EMPLOYEE SET NAME='RANA' WHERE ID IS=107;**

(3) Update the id 107 to 108?

➤ **UPDATE EMPLOYEE SET ID =108 WHERE ID =107;**

(4) Replace the city delhi to Mumbai in the table?

➤ **UPDATE EMPLOYEE SET CITY='MUMBAI' WHERE CITY ='DELHI';**

(5) Update everyone salary by 200?

➤ **UPDATE EMPLOYEE SET SALARY=SALARY+200;**

(6) Decrease everyone salary by 500?

➤ **UPDATE EMPLOYEE SET SALARY=SALARY-500;**

DELETE

(1) Delete a record from employee where id =101?

➤ **DELETE FROM EMPLOYEE WHERE ID =101;**

(2) Delete a record from employees where id is 102 and 103?

➤ **DELETE FROM EMPLOYEE WHERE ID IN (102,103);**

(3) Delete a record from employee where name is shyam?

➤ **DELETE FROM EMPLOYEE WHERE NAME='SHYAM';**

(4) Delete a column email from the table?

➤ **ALTER TABLE EMPLOYEE DROP EMAIL;**

(5) Drop the table?

➤ **DROP TABLE EMPLOYEE;**

DISTINCT RECORD FROM TABLE

(1) Print only unique city name from the table?

➤ **SELECT DISTINCT(CITY) FROM EMPLOYEE;**

(2) Give me the distinct salary from the table?

➤ **SELECT DISTINCT(SALARY) FROM EMPLOYEE;**

(3) Concat employee name and salary then print output?

➤ **SELECT CONCAT (NAME,SALARY) FROM EMPLOYEE;**

(4) Separate employees name and salary with an under score(_) and then concat and print the output?

➤ **SELECT CONCAT(NAME,'_',SALARY) FROM EMPLOYEE;**

(5) Remove white space from the left side of the name and then print?

➤ **SELECT LTRIM(NAME) FROM EMPLOYEE;**

(6) Remove white space from the right side of the name and then print?

➤ **SELECT RTRIM(NAME) FROM EMPLOYEE;**

(7) Remove white space from right side and left side of name and then print it?

➤ **SELECT TRIM (NAME) FROM EMPLOYEE;**

(8) Remove white space from both side of name then concat then separate with underscore?

➤ **SELECT CONCAT(TRIM(NAME),'_' TRIM(SALARY) FROM EMPLOYEE;**

(9) Concat the name and salary and then print the output in descending order?

➤ **SELECT CONCAT(NAME,SALARY) FROM EMPLOYEE ORDER BY
CONCAT(NAME,SALARY) DESC;**

(10) sort the employee name in ascending order?

➤ **SELECT NAME FROM EMPLOYEE ORDER BY NAME ASC;**

(11) Find the length of each and every name in the table?

➤ **SELECT LENGTH(NAME) FROM EMPLOYEE;**

SUB – QUERY

(1) Find second max salary?

➤ **SELECT MAX(SALARY) FROM EMPLOYEE WHERE SALARY<(SELECT MAX(SALARY) FROM EMPLOYEE);**

(2) Find out third max salary?

➤ **SELECT MAX(SALARY) FROM EMPLOYEE WHERE SALARY<(SELECT MAX(SALARY) FROM EMPLOYEE WHERE SALARY<(SELECT MAX(SALARY) FROM EMPLOYEE));**

(3) Give the employee name who got incentives?

➤ **SELECT DISTINCT NAME FROM EMPLOYEE WHERE ID IN (SELECT ID FROM INCENTIVE);**

(4) Give me the name of employee who are not married?

➤ **SELECT NAME FROM EMPLOYEE WHERE ID IN (SELECT ID FROM STATUS WHERE MARITAL STATUS='NO');**

(5) Give me the only female employee and also their salary?

➤ **SELECT NAME,SALARY FROM EMPLOYEE WHERE ID IN (SELECT ID FROM STATUS WHERE GENDER='F');**

(6) Give me the employee name who got incentive amount greater than or equal to 5000?

- **SELECT NAME FROM EMPLOYEE WHERE ID IN (SELECT ID FROM INCENTIVE WHERE INCENTIVE AMMOUNT >= 5000);**

(7) Give me the employee name who is married and has got incentive?

- **SELECT NAME FROM EMPLOYEE WHERE ID IN (SELECT ID FROM INCENTIVE WHERE ID IN (SELECT ID FROM STATUS WHERE MARITAL STATUS = 'YES'));**

(8) Give me the employee name whose salary is greater than 10000 and he is married?

- **SELECT NAME FROM EMPLOYEE WHERE ID IN (SELECT ID FROM STATUS WHERE MARITAL_STATUS = 'Married' AND ID IN (SELECT ID FROM EMPLOYEE WHERE SALARY > 10000));**

(9) Give me the employee name who did not get incentive and they are married?

- **SELECT NAME FROM EMPLOYEE WHERE ID NOT IN (SELECT ID FROM INCENTIVE) AND ID IN (SELECT ID FROM STATUS WHERE MARITAL_STATUS = 'Married');**

(10) Give me the employee incentive date whose name ends with letter s?

- **SELECT DATE FROM INCENTIVE WHERE NAME LIKE '%S';**

(11) Give me marital status of employee residing in delhi?

- **SELECT MARITAL STATUS FROM STATUS WHERE ID IN (SELECT ID FROM EMPLOYEE WHERE CITY = 'DELHI');**

(12) Give me the employee name who are married and gender is female?

- **SELECT NAME FROM EMPLOYEE WHERE ID IN (SELECT ID FROM MARITAL STATUS WHERE GENDER = 'FEMALE');**

JOIN

(1) Subtracting two tables ?

- **SELECT * FROM STUDENTS WHERE ID NOT IN (SELECT ID FROM ATTENDANCE);**

INNER JOINT:

(1) Give matching record from both tables?

- **SELECT EMPLOYEE.NAME, EMPLOYEE.DEPARTMENT, ATTENDANCE.ATTENDANCE_DATE FROM EMPLOYEE INNER JOIN ATTENDANCE ON EMPLOYEE.ID = ATTENDANCE.ID;**

(2) Give me the matching records between two tables and display the class, location and employee id?

- **SELECT EMPLOYEE.ID, EMPLOYEE.LOCATION,ATTANDANCE.CLASS FROM EMPLOYEE INNER JOIN ATTANDANCE ON EMPLOYEE.ID= ATTANDANCE.ID;**

(3) Give me the employee id, name, depart, location, attendance date and class only if records are common between two tables?

- **SELECT EMPLOYEE.ID, EMPLOYEE.NAME, EMPLOYEE.DEPART, EMPLOYEE.LOCATION, ATTANDANCE.CLASS WHERE EMPLOYEE INNER JOIN ATTANDANCE ON EMPLOYEE.ID=ATTANDANCE.ID;**

LEFT JOINT:

(1) Give all the records from left table and only matching records from right table?

- **SELECT * FROM EMPLOYEE LEFT JOIN ATTANDANCE ON EMPLOYEE.id = ATTANDANCE.id;**

(2) Give me the employee name, dept and attendance_date such that all the records are displayed from the table and only matching records are displayed from right table?

➤ **SELECT EMPLOYEE.NAME, EMPLOYEE.DEPT, ATTENDANCE.attendance_date FROM EMPLOYEE LEFT JOIN ATTENDANCE ON EMPLOYEE.ID=ATTENDANCE.ID;**

(3) Give me employee id, dept and class such that all the records are display from the left table and only matching records from right table?

➤ **SELECT EMPLOYEE.ID, EMPLOYEE.DEPT,ATTENDANCE.CLASS FROM EMPLOYEE LEFT JOIN ATTENDANCE ON EMPLOYEE.ID = ATTENDANCE.ID;**

(4) Give me all the records from table t1 and only matching records from table t2 and output should be consist of B,C,D?

➤ **SELECT T1.B, T1.C, T2.D FROM T1 LEFT JOIN T2 ON T1.A=T2.A;**

RIGHT JOIN:

(1) Give me all the record from right table and only matching record from left table?

➤ **SELECT * FROM LeftTable RIGHT JOIN RightTable ON LeftTable.id = RightTable.id;**

(2) Give me employee name, dept, attendance-date such that all the records are picked up from right table and only matching records from the left table?

➤ **SELECT EMPLOYEE.NAME,
EMPLOYEE.DEPTT,ATTANDANCE.attandande_date FROM EMPLOYEE
RIGHT JOIN ATTANDANCE ON EMPLOYEE.ID=ATTANDANCE.ID;**

(3) Give me attendance-date, class and employee name such that all the details of attendance should be taken into consideration but then only matching records of employees should be pick up?

➤ **SELECT ATTANDANCE.attendance_date, ATTANDANCE.class,
EMPLOYEE.employee_name FROM EMPLOYEE RIGHT JOIN
ATTANDANCE ON EMPLOYEE.employee_id =
ATTANDANCE.employee_id;**