

Any Queries

- ① Query the list of City Name from a table that do not start with vowels and do not end with vowels. Your result cannot contain duplicates.

It can be done using `SUBSTR(String, Starting,
 ending Val); length);`

M U M B A I

1 2 3 4 5 6

6 - 5 - 4 - 3 - 2 - 1

CITY

> SELECT DISTINCT (ename) FROM emp
WHERE SUBSTR (city, 1, 1) NOT IN ('a', 'e', 'i', 'o', 'u', 'A', 'E', 'I', 'O', 'U') AND
SUBSTR (city, +1, +1) NOT IN ('a', 'e', 'i', 'o',
'u', 'A', 'E', 'I', 'O', 'U');

② HOW TO CREATE A TABLE (STRUCTURE)

FROM EXISTING TABLE;

> SELECT *

~~FROM~~ INTO NEWTABLE

FROM oldtable

WHERE

`(1=0)`

→ It is false

Condition.

where rows are not

inserted only column

empid empname sal deptid deptname dsal

```
> SELECT DEPT-ID, MAX(SALARY) FROM  
EMP GROUP BY DEPT-ID;
```

④ SQL query to find all duplicate emails in a table

> SELECT email from emp ~~with~~ group by
email having count > 1;

5) Stmt: Select all top N records from emp

→ Select * from emp ~~rownum < N~~
Order where rownum < N Order by sal desc

> Select * from emp where rownum < N
order by desc;

⑥ Retrieve emp fname and emplname in a single column as full name, first name, and last name separated with Space.

Oracle Server : Select ename||' '||ename F as
Full Name from emp;

SQL Server : Select concat(ename, ' ', ename) as FullName from emp;

7) Retrieve emp positions along with total salaries paid for each of them:

SQL> Select emp_positions, sum(salary) from emp
group by ~~salaries~~ emp_positions;

8) Fetch details of employees with address as
(Delhi) "det"("DEL");

SQL> Select # from emp where address like
"DELHI";

9) Fetch only Ename from Full name column.

> Select Substr(Fname, 1, instr(fullname, ' ')-1)
as LAST_NAME from emp;

10) Fetch only PNAME from Fullname column

> Select Substr(Fullname, 1, instr(fullname, ' ')-1)
as FIRST_NAME from emp;

11) Increase income of all employees by
5% in a table.

SQL> update emp set income = income + (income * 0.05);

12) Find names of employees starting with A;

SQL> Select name from emp where name like 'A%';

13) Find no.of employees working in department 'ABC'

SQL> Select count(*) as no_of_emp from emp where dept = 'ABC';

14) Print details of employee whose first_name starts with 'A' and contains 6 alphabets.

SQL> SELECT * FROM emp where FIRST_NAME LIKE '_____A';

15) Print details of Employee, whose salary between 10,000 and 50,000;

SQL> SELECT * FROM Employees WHERE SALARY IN (10,000 - 50000);

SQL> SELECT * FROM EMP WHERE SALARY BETWEEN 10,000 AND 50,000;

16) SECOND HIGHEST SALARY

SQL> SELECT MAX(SALARY) FROM EMP WHERE SAL < (SELECT MAX(SALARY) FROM EMP);

17)

SQL> SELECT ~~EMP~~ SAL FROM EMP E1 WHERE I = (SELECT ~~EMP~~ COUNT(DISTINCT SAL)) FROM EMP E2 WHERE E1.SAL < E2.SAL;

16)

SQL> SELECT TOP 1 SALARY FROM
SELECT TOP 2 SALARY FROM Employee
ORDER BY SALARY DESC) AS EMP1
ORDER BY SALARY ASC;

ROWS

17) HOW TO REMOVE DUPLICATES FROM TABLE

① USING TEMPORARY TABLE

(i) SELECT DISTINCT * ~~FROM~~ INTO new_table
FROM old_table;

(ii) DELETE * FROM old_table;

(iii) INSERT INTO old_table SELECT * FROM
new_table;

(iv) DROP TABLE newtable;

> INSERT INTO ~~old_table~~, New_table, FROM old
table;

18) ② USING AUTO ID

empid.	emp nam.
1001	ABC
1002	DEF
1003	FGH
1001	ABC
1001	ABC

- ALTER TABLE employee ADD auto-id INT IDENTITY(1,1);
- DELETE * FROM employee WHERE auto-id NOT IN (SELECT MIN(auto-id) FROM employee GROUP BY emp-id, empname);

empid	empname	auto id	
1001	ABC	1	
1002	DEF	2	→ employee
1003	FGH	3	
1001	ABC	4	
1001	ABe	5	

③ USING ROW_NUMBER

> DELETE FROM (SELECT *, rownumber()
OVER (PARTITION by emp-id order by emp-id)
as rn FROM my Table) where rn > 1

emp-id	emp-name	rownumber
1001	ABC	1
1001	ABC	2
1001	ABC	3
1002	DEF	1
1003	FGH	1

④ USING CTE (Common Table Expression)

> WITH CTE

as (SELECT row_number() OVER (partition by id ORDER BY id) as rn FROM mytable)

> DELETE FROM cte WHERE rn > 1;

Creates table as ROW NUMBER TABLE.

⑮ Query name of Students have Scored > 75

Order by your op by last 3 characters of

each name. If 2 or more students have

names ending with same last character

(Kavya, Navya), secondary sort them by
ascending order.

SQL> SELECT NAME FROM Students

WHERE marks > 75 ORDER BY

SUBSTR(name, -³, 3), ID ;

-3

SUBSTR (String, starting ^{length}, length).

19) QUERY an alphabetically ordered list of all names , immediately followed by first letter of each profession enclosed in parenthesis .

SQL > SELECT name || 'c' || substr(profession, 1, 1) || ')' AS NAME FROM profession
Order by name ;

**

20) QUERY TO FIND ALL DUPLICATES IN TABLE

SQL > SELECT emp_id FROM employee GROUP BY emp_id HAVING COUNT(emp_id) > 1;

emp_id	name
1	A
2	B
3	C
1	A
2	B



id	name
1	A
1	A
2	B
2	B
3	C

O/P

1
2

(21) QUERY TO FETCH ALL THE EMPLOYEE
WHICH ARE ALSO MANAGERS FROM EMPLOYEE
TABLE.

empld	emp name	man id	doj	city
121			450	
321			123	
450			320	

SELF JOIN

SELECT emp_id DISTINCT emp_id
FROM employees E INNER JOIN
employees M ON E.emp_id = M.emp_id;

(22) Select the job AND THE MINIMUM
AND THE MAXIMUM SALARIES FOR EACH
GROUP OF ROWS WITH SAME JOB CODES,
BUT ONLY FOR GROUPS WITH MORE THAN
ONE ROW AND WITH MAX SALARY GREATER
THAN OR EQUAL TO 27000.

SQL> SELECT job_id, min(sal), max(sal), FROM
EMP GROUP BY (job_id)
HAVING COUNT (<#>) > 1 AND
MAX(SALARY) >= 27000;

23)

	<u>car_code</u>	<u>car_name</u>	<u>Branch</u>	<u>units_sold</u>
1	101	ABC	Mumbai	80
2	102	PQR	Delhi	21
3	102	PQR	Mumbai	14

HOW TO ADD UNIQUE ROW NO?

~~SQl7~~

Row_Number

**

SQl7 SELECT Row_Number() OVER()

AS row_no, car_code, car_name,

branch, units_sold FROM SALES;

**

24) HOW TO FIND FIRST, SECOND, THIRD

LARGEST MARKS OBTAINED;

SQl7 SELECT Top 3 marks FROM STUDENTS;

SQl7 SELECT Top 3 marks FROM

Students WHERE Subject = 'Science'

ORDER BY MARKS DESC;

Q5) Query the NUMBER OF OCCURRENCES OF EACH OCCUPATION, SORT IN ASCENDING ORDER & OUTPUT THEM IN THE FORMAT:-

O/P: There are a Total of [Occupation_count]
[Occupation]s

Name	Occupation
Rachael	Actor
Ross	Actor
chandler	comedian

SQL> SELECT OCCUPATION || COUNT(OCCUPATION)
FROM EMP GROUP BY OCCUPATION;

O/P:

Actor (2)
comedian(1)

AS HERE IT IS GIVEN SORTED SO USE ORDER

SQL> SELECT OCCUPATION || COUNT(OCCUPATION)
FROM EMP GROUP BY OCCUPATION
ORDER BY OCCUPATION;

O/p: There are a total of 2 Actors!

There are a total of 1 comedians.

TOP 10 QUERIES

1) WRITE A QUERY TO GET THE CURRENT DATE:

SQL> SELECT SYSDATE();

2) WRITE A QUERY TO RETRIEVE THE FIRST TWO CHARACTERS OF EMP_LASTNAME R FROM THE emp table.

SQL> SELECT SUBSTR(ename, 1, 2) FROM EMP;

**
3) WRITE A QUERY TO CREATE A TABLE WHICH CONSISTS OF DATA AND STRUCTURE COPIED FROM OTHER TABLE;

SQL> create table tmp as select * from emp;

SQL> Select * from tmp;

(4) WRITE A QUERY TO CREATE A NEW TABLE ONLY THE STRUCTURE COPIED FROM OTHER TABLE;

SQL> ~~SELECT~~ create table tmp as

SELECT * FROM emp where 1=0;

(5) WRITE A QUERY TO FETCH FIRST N RECORDS

SQL> SELECT * FROM emp ORDER BY EMP_ID
= LIMIT 5; *** Rownum <= 5.
In oracle we use rownum

(6) WRITE A QUERY TO FETCH DETAILS OF EMP LAST NAME ENDS WITH AN ALPHABET 'S' AND CONTAINS 4 ALPHABETS.

SQL> SELECT * FROM EMP WHERE LNAME LIKE '____s';

(7) WRITE A QUERY TO FETCH DETAILS OF ALL EMP WITH F-NAME "SMITH" and "BLAKE"

SQL> SELECT * FROM EMP
WHERE F_NAME NOT IN ('SMITH', 'BLAKE');

(8) SELECT COUNT(*)

= WRITE A QUERY TO FETCH THE DEPARTMENT WISE COUNT OF EMPLOYEE SORTED BY DEPARTMENTS COUNT IN ASCENDING ORDER

SQL> SELECT COUNT(EMPNO) C, JOB FROM EMP
GROUP BY JOB ORDER BY C;

(9) WRITE A QUERY TO PRINT MAX SALARY
MIN SALARY AND AVG SALARY FROM EMP

SQL> SELECT MAX(SALARY), MIN(SAL),
AVG(SAL) FROM EMP;

SQL> SELECT max(sal) as 'MAX SAL' FROM
EMP GROUP BY dept-no;

(10) WRITE A QUERY TO PRINT LAST 5
RECORDS IN A TABLE;

① COUNT(*)

- RETURNS TOTAL ROWS IN THE TABLE, INCLUDING NULL VALUES.

② COUNT(column-name)

- It will count the no.of records where column name is not null.

③ COUNT(*) → COUNT('') + count('')