

SQL) select * from emp

where to_char(hiredate, 'Month') = 'February';

No row selected

SQL)

Select * from emp

where to_char(hiredate, 'Month') = 'February'; sum
size

if it's correct condition
it should be lower case

space b/w the word

will's appearance

of month

it should be upper case

it's correct

SQL)

Select * from emp

where to_char(hiredate, 'mon') = 'feb';

many months
yourself
Put 6sp.

SQL)

Select * from emp

where to_char(hiredate, 'month') = 'september';

if you write month you have to provide maximum length of month

SQL)

Select * from emp and not in month then size of month -> 'MAY-----';
where to_char(hiredate, 'mon') = 'may';

No row selected

it works for all months but you have to
pass only 3 characters as month

SQL)

Select * from emp where to_char(hiredate, 'mon') = 'march';

No row selected

uppercase because in emp table
all months are uppercase only

SQL)

Select * from emp

where to_char(hiredate, 'month') = 'meep-----';

18 | 5 | 19

Group Functions

multi row functions are group functions executing

once w.r.t. group

1) count

Count function returns the count of actual values
from the given columns

Ex:- ① select count(*) from emp;

② select count(ename) from emp

③ select count(sal) from emp;

ARUN'S
ARUN'S

① select count (column) from emp;

4

PAGE NO. 111
DATE 1/1/11

count is the only function that can operate with * (all the columns)

SQL) select count (*) from emp;

where job = 'sales man';

4

MIN: min function returns the minimum value of actual from the given column

SQL) select min (sal) from emp;

500

SQL) select min (comm) from emp;

0 → zero is the minimum commission

SQL) select min (ename) from emp;

ADAMS

SQL) select min (HIREDATE) from emp;

12 - Dec - 80

MAX

max function returns the maximum value of actual values from emp

SQL) select max (sal) from emp;

5000

SQL) select max (comm) from emp;

1400

SQL) select max (hire date) from emp;

23 - May - 87

SQL) select max (ename) from emp;

WARD

COUNT, MIN, MAX can operate on almost only column
Ex:- Number, Vchar, date

ARUN'S
PAGE NO.
DATE / /

SUM

SUM returns sum of actual values from columns of numeric values

MEAN

SQL> select sum(sal) from emp;
 29025

SQL> select sum (comm) from emp;
 2200

SQL> select sum (sal)/count (sal) from emp
 2073.21429

SQL> select sum (comm)/(count + 1) from emp
 157.142857 (wrong)

SQL> select sum (comm)/(count (comm)) from emp
 550 (correct)

Avg

Avg returns the avg values of actual values of column

SQL> select Avg (comm) from emp;
 550

SQL> select avg(sal) from emp;
 2073.21429

Sum and Avg columns can only operate with numeric columns

=> display the employee who is getting max salary

Sept 10
Select
From
Where
Group
Order by

EX. Display

Select
From
Group

Select
From
Group

=> display

SQL> Select

SQL> Select

SQL> Select

A function

group by clause

ARUN'S

PAGE NO.

DATE / /

syntax

select

From

where

group

order by

group expression (group column/func/tur)

table name

condition (?)

group column

group expression (group column/group func)

(can contain)

group by clause is used to group the table based
on the distinct values from the given columns;

Ex. Display job wise num of employee

select job, count(*)

from emp → classic 4

group by job

select job

from emp → salesman

group by job

select count(*)

from emp → 4

group by job

⇒ display department minimum salary and max salary

SQl) select Dept No, count(*), min(Sal), max(Sal).

From scott

group by Dept No; 3 row selected

SQl) select ename, count(*) from emp;

Error

SQl) select ename from emp;

7 rows

A column cannot be passed along with in group function select clause. even though the column is passed it has to be the part of group expression

Select ename, count(*) from emp
group by job; → error

2) display max salary if 'salesman'
SQL> select max(sal) from emp
where job='salesman';

⇒ display jobwise max salary, total salary, for the employee working
in dept no 20 and dept no 30

SQL> select job, max(sal), sum(sal)
from emp
where dept_no in(20, 30)
group by job;

⇒ display job wise number of employees in ascending order number
SQL> select job, count(*) from emp;
group by job, ^{subquery} in case of decending
order by count(*); [desc] order

→ To set it in alphabetic order (x) group byename
SQL> select job, count(*) from emp
group by job
order by job;
and set it in alphabetic order

select job, dept_no, count(*) from emp
group by job, dept_no;

NOTE :-

group by clause passed with multiple columns
a group w.r.t distinct combination of the value

⇒ display depart wise, number of employees working more
than 3 employees

SQL> select dept_no, count(*)
from emp
group by dept_no;
having count(*) > 3;

select dept_no, count(*)
from emp
where count(*) > 3;
group by dept_no;

want all
where class

Select * from
Table a
where
group by
having
order by

HAVING clause is used
SQL> select dept_no, count(*)
from emp
group by dept_no;

group by dept_no;
HAVING count(*) >=

SQL> select dept_no, count(*)
from emp
group by dept_no;

group by dept_no;

⇒ display dept no & sal
SQL> select dept_no, count(*)
from emp
where sal > 1500
group by dept_no;

group by dept_no;
HAVING count(*) >=

SQL> select count(*)
having count(*) >=

14

SQL> select count(*)
having count(*) >=

Select * from
order by

group by
according to
table new
order

Select
From
Where

group expression
Table name
condition (?)

ARUN'S
PAGE NO.
DATE / /

group
having
order by

group column

group condition (?)
group expression

HAVING clause is used to filter group records

SQL select Dept No, count(*)
from emp

group by Dept No

Having count(*) > 3

SQL select Dept No, count(*)
from Emp

group by Dept No

Having Dept No = 20;

→ Display Dept No employee with sal greater than 1500 and number it

SQL select Dept No, count(*)

from emp

where sal > 1500

group by Dept No

Having Count(*) > 3 How to check sal

SQL select Count(*) from emp;

Having Count(*) >= 14;

.Count(*)

14

SQL select Count(*) from emp

Having Count(*) > 20

Select * from emp

Order By procedure desc;

14 row selected in reverse order

→ ordered to procedure

↓ table reverse

Miller

Forest

Select * from emp

Order By Grade Desc;

14 row selected correctly

→ alphabet desc order

Word

Tanner

group and order

1) select ename from emp

group by ename

order by ename; \rightarrow ascending

1 record selected

2) select ename ~~or~~ * from emp

order by ename;

1 record selected

in First query we can select only one column which is going to group the column and it gives the result whatever it's have distinct value

In Second query if ~~or~~ we can select any no of column

1) select job from emp

group by job

order by job; \rightarrow 4 rows

2) select job/* from emp

group order by job: \rightarrow 1 row selected

bcz we select all job in a table

whether it's repeated or not bcz we are not selected distinct value we selected all

3) select job from emp

group by job

order by max(sal);

Job

clerk

salesman

manager

analyst

president

Q) select job, max(sal) from emp
group by job;
order by max(sal);

Job max(sal)

clerk 1300

salesman 1600

manager 2075

Analyst 3000

president 5000

In query 3 & 4 both sorted ~~on~~ based on max
sal only But in query 3 we are not
displayed max sal.