Day 12:

--Sales1

id product sales

1001 keyboard 20

1002 keyboard 25

1003 laptop 30

1004 laptop 35

1005 laptop 40

1006 monitor 45

1007 webcam 50

1008 webcam 55

output1 (Find out minimum sales of each product)

id product sales

1001 keyboard 20

1002 keyboard 20

1003 laptop 30

1004 laptop 30

1005 laptop 30

1006 monitor 45

1007 webcam 55

1008 webcam 55

>select id,product,sales,min(sales)over(partition by product)

as minimum\_sales from sales1;

output2 (find out running sum of sales for each product)

id product running\_sum\_of\_sales

1001 keyboard 20

1002 keyboard 45

1003 laptop 30

1004 laptop 65

1005 laptop 105

1006 monitor 45

1007 webcam 50

1008 webcam 105

>select id,product,sales,sum(sales)over(partition by product order by id) as running\_sum

from sales1;

########### Distinct

use to remove the duplicate records from the output result set

i.e eliminates duplicates from output

syntax-->

select column1,column2,....columnN from table\_name

>select distinct country\_name from states;

>select distinct country\_name,state from states;

(it will remove the duplicate combination)

1)select distinct country\_name from emp1

or

2)select country\_name from states

group by country\_name

[same output query1 & query2]

########### difference between distinct and group by

Group by lets you use aggregate functions like min,max,avg,count,sum

On other hand distinct just removes duplicates.

Both will give same result when no aggregation function is used

Group by is required if you are aggregating data.

#Trunc function

used to remove the decimal point

ex- 12.67 -->12

>select trunc(12.6) from dual;

12

trunc upto 2 decimal point

ex-12.67898 --> 12.67

>select trunc(12.67898,2) from dual;

12.67

#round function

used to round up the value

ex-- 12.678 -->13

>select round(12.678) from dual;

13

>select round(12.378) from dual

12

###Subqueries

--> writing a query inside a outer query is called subquery.

ex-->

select empid,salary from (

select \* from employ1);

1st subquery or inner query get executed and then outer

query get executed.

Types of subqueries..

1)scalar subquery

2)multi values subquery

3)multi column subquery

4)nested subquery

5)correlated subquery

1)scalar subquery (use = operator)

Subquery returns a single value to the main query.

i.e always return 1 row and 1 column..

--Fetch employ names working in sales department

>select \* from employ1 where deptno=

(select deptno from dept1 where dname='SALES');

here subquery/inner query returns single value (i.e deptno)

2)multivalued subquery ( use IN operator)

in this subquery/inner query returns more than 1 value to the

main query

i.e more than 1 row but 1 column

--Fetch employ names working in sales & production department

>select \* from employ1 where deptno in (30,40);

>select \* from employ1 where deptno in

(select deptno from dept1 where dname='SALES' or dname='PROD');

If you are getting list of values from inner query then

use IN operator

3)Multi column subquery

In this more than 1 column value is returned by subquery to

main query

--Fetch employ name having same department and salary as

that of yash

>select \* from employ1 where (deptno,salary)

in (select deptno,salary from employ1 where ename='yash');

4)Nested subquery

if subquery1 written inside subquery2 and subquery2 written

inside subquery3 and so on . then it is called nested

subquery

ex--Find 3rd highest salary from employ table

>select max(salary) from employ1 where salary<(

select max(salary) from employ1 where salary<(

select max(salary) from employ1));