

SQL Day 21 : View

View

What is mean by view?

Ans: It is replica of one or more table.

Types of view

There are two types of view

- 1) Simple view
- 2) Complex view

Simple view

- Derive the data from only one table
- Does not contain group function or group of data
- **We can perform DML (insert, update, delete) operation through the view **except for following case****
 - If select statement has distinct keyword then we can't perform DML Operation
 - If actual table column has some constraint and those columns selected in view then we can't perform DML operation

Complex view

- Derive the data from many tables
- Contains group functions or group of data
- Does not always allow DML (insert, update, delete) operation through the view

How to Create a simple view?

Syntax:

Create or Replace View view_name

AS select query;

Example:

Create emp_view which contain details of Employee Who belongs to department id 1

SQL Query to create View

Create or Replace View emp_view as

select * from employee where dept_id=1;

How to select data from view?

Select column_names from view_name;

Select * from Emp_view;

Creating view for required Column.

Create emp_view which contain emp_no, emp_name and salary of those employee whose belongs to department id =2

Create view emp_view1 as select emp_no, emp_name,salary from Employee where dept_id=2;

How to insert data into view?

If view is simple then we can perform DML Operation (insert update and delete) operation on view.

Whatever DML operation performed on simple same operation will get reflected on actual table

Insert into emp_view values(201,'Nayana',8000)

Creating a Complex view

```
Create or Replace view Emp_view2 (name,minsal,maxsal)
As select d.dept_name,min(e.salary),max(e.salary) from Employee
E JOIN Department d ON
d.dept_id=e.dept_id
group by e.dept_name
```

Important points about complex view while performing DML (insert update delete) operation

We cannot perform insert update and delete operation on complex view if it contains

- 1) Group function
- 2) A group by clause
- 3) The Distinct keyword

```
insert into emp_view2 values('MBA',5000,6000)
```

SQL History

ORA-01779: cannot modify a column which maps to a non key-preserved table

```
delete from emp_view2 where name='IT'
```

History

ORA-01732: data manipulation operation not legal on this view

```
update emp_view2 set minsal=6000 where name='IT'
```

story

```
ORA-01732: data manipulation operation not legal on this view
```

How to remove view?

Drop VIEW view_name;

Example:

Drop View emp_view2;