

17CS2009 Database Systems Lab

Ex. No:7

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Ex. No. 7 VIEWS

Aim

In SQL, a view is a virtual table based on the result-set of an SQL statement.

A view contains rows and columns, just like a real table. The fields in a view are fields from one or more real tables.

Description

We can create View using CREATE VIEW statement. A View can be created from a single table or multiple tables. A view can contain all rows of a table or select rows from a table. A view can be created from one or many tables which depends on the written SQL query to create a view.

Questions:

Note: Make use of emp_company, employee, company

1. Create a view to display the employee name, company name, salary, jdate, employee city and company city of the employees.

```
SQL> create view details as (select e.ecity,ec.ename,ec.cname,ec.salary,ec.jdate,c.city from employee_cs076 e join emp_company_cs076 ec
on e.ename=ec.ename join company_cs076 c on ec.cname=c.cname);
View created.
```

2. Select the view name and text from the USER_VIEWS data dictionary view.

```
SQL> select view_name,text from user_views;
```

```
VIEW_NAME
```

```
TEXT
```

```
DETAILS
```

```
(select e.ecity,ec.ename,ec.cname,ec.salary,ec.jdate,c.city from employee_cs076
```

3. Attempt to change the joining date of Anil to 10-dec-99 in the view which is created. Is the view updatable? If yes, is the updation reflected in the base table.

It is not possible to alter the value as the view is complex view so we can't update a value.

4. Create a view v1 to display the employee name, salary and company name of the employees who work in the company Acc.

```
SQL> create view v1 as select ename,salary,cname from emp_company_cs076 where cname='acc';
```

```
View created.
```

5. Insert the following data into the base table
<ename:Ashok,cname:Acc,Salary:1200,jdate:NULL>

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```
SQL> insert into emp_company_cs076 values('ashok','acc',1200,NULL);
```

1 row created.

```
SQL> select * from emp_company_cs076;
```

ENAME	CNAME	SALARY	JDATE
anil	acc	1500	01-MAY-89
shankar	tata	2000	10-JUL-90
jaya	cmc	1800	07-JUN-91
sunil	cmc	1700	01-JAN-88
vijay	tata	5000	03-JAN-88
prakash	tata	3000	27-MAY-89
ajay	acc	8000	30-APR-95
amol	acc	1000	17-MAR-95
kiran	hyundai mobis	30000	18-DEC-98
ashok	acc	1200	

10 rows selected.

6. Display the inserted tuple by using v1.

```
SQL> select * from v1;_
```

ENAME	SALARY	CNAME	JDATE
anil	1500	acc	01-MAY-89
ajay	8000	acc	30-APR-95
amol	1000	acc	17-MAR-95
ashok	1200	acc	

7. Create the same with check option.

```
SQL> create view v2 as select ename,salary,cname,jdate from emp_company_cs076 where cname='acc'with check option;
```

View created.

8. Create a view for retrieving company name, its average salary, its maximum and minimum salary.

```
SQL> create view saldet as select cname,avg(salary) as avgsal,max(salary)as maxsal,min(salary) as minsal from emp_company_cs076 group by cname;
```

View created.

```
SQL> select * from saldet;
```

CNAME	AUGSAL	MAXSAL	MINSAL
acc	2925	8000	1000
cmc	1750	1800	1700
tata	3333.33333	5000	2000
hyundai mobis	30000	30000	30000

9. Write SQL query to create a view consisting of ename, cname and salary of the employees who joined later than the year 1-Feb-98. Concatenate the columns ename and cname and provide new column name as "Employee Company_Name".

```
SQL> create view empdet as select ec.salary,concat(ec.ename,ec.cname) as employee_company_name from emp_company_cs076 ec where jdate>'1-Feb-98';
```

View created.

```
SQL> select * from empdet;
```

SALARY	EMPLOYEE_COMPANY_NAME
30000	kiranhyundai mobis

10. Create a view that gives information about employee name, salary and living city.

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```
SQL> create view empcity as select ec.ename,ec.salary,e.ecity from employee_cs076 e,emp_company_cs076 ec where e.ename=ec.ename;
View created.
SQL> select * from empcity;
ENAME          SALARY ECITY
-----
anil            1500 nagpur
shankar         2000 bombay
jaya            1800 chennai
sunil           1700 bombay
vijay           5000 delhi
prakash         3000 calcutta
ajay            8000 chennai
7 rows selected.
```

11. Perform inline view to display the top five salaried employee names and their salaries.

```
SQL> select rownum as rank,salary from (select salary from emp_company_cs076 order
er by salary desc)where rownum<=5;
```

RANK	SALARY
1	30000
2	8000
3	5000
4	3000
5	2000

12. Write an SQL query to display the details of five employees who have joined recently the companies.

```
SQL> select rownum as rank,jdate from(select jdate from emp_company_cs076 order
by jdate desc);
```

RANK	JDATE
1	
2	18-DEC-98
3	30-APR-95
4	17-MAR-95
5	07-JUN-91
6	10-JUL-90
7	27-MAY-89
8	01-MAY-89
9	03-JAN-88
10	01-JAN-88

10 rows selected.

Results:

The above queries have been executed and the results have been verified.