

# Nepal College of Information Technology

Balkumari , Lalitpur

## Database Management System

### Lab 5

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**Title: VIEWS**

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**Objective:**

To create and manipulate various database objects of table using views.

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**Procedure:**

A view is the tailored presentation of data contained in one or more table and can also be said as restricted view to the data's in the tables.

A view is a 'virtual table' or a 'stores query' which takes the output of a query and treats it as a table. The table upon which a view is created is called as base table.

A view is a logical table bases on a table or another view. A view contains no data of its own but is like a window through which data from table can be viewed or changed. The view is stores as a SELECT statement in the data dictionary.

Advantages of a view:

- Additional level of table security.
  - Hides data complexity.
  - Simplifies the usages by combining multiple tables into a single table.
  - Summarize data from various tables which helps to generate reports.
- .....

## SQL Command:

### 1. Creating views

- Database views are created using CREATE VIEW statement.
- Views can be created from a single table, multiple tables, or another view.
- Syntax:

```
CREATE VIEW view_name AS  
SELECT column1, column2.....  
FROM table_name  
WHERE [condition];
```

- Example:

```
CREATE VIEW customer_view AS  
SELECT name, age  
FROM customer;
```

### 2. TO query view

- Syntax:

```
SELECT * FROM view_name WHERE clause
```

- Example:

```
SELECT * FROM customer_view
```

### 3. Update view

- Syntax:

- ALTER VIEW view\_name AS  
SELECT column1, column2.....  
FROM table\_name  
WHERE [condition];

- UPDATE view\_name  
SET column\_name = value  
WHERE clause

- Example:

- ALTER VIEW customer\_view AS  
SELECT name, age, address  
FROM customer;
- UPDATE customer\_view  
SET AGE = 35  
WHERE name='ram';

#### 4. Delete view

- Syntax:

- DROP VIEW view\_name
- DELETE FROM view\_name WHERE clause

- Example:

- DROP VIEW customer\_view
- DELETE FROM customer\_view  
WHERE age = 22;

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#### LAB EXERCISE:

1. To display only the details of employees who are AP.
  2. To display only name, salary and department of employee whose salary is greater than 10000.
  3. To display name, age of customer as well as order date and amount.
  4. Update view of Q.N.3 to include address and salary of customer.
  5. Again update view of Q.N.4 to include only salary greater than 5000.
  6. Drop above view.
- .....

Table1: customer

cid	name	age	address	salary
1	ram	32	kathmandu	2000.00
2	shyam	25	patan	1500.00
3	hari	23	dharan	2000.00
4	gopal	25	pokhara	6500.00
5	sita	27	bhaktapur	8500.00
6	gita	22	illam	4500.00
7	rita	24	banepa	10000.00

Table 2: order<sub>1</sub>

oid	O_date	cid	amount
102	2015-10-08 00:00:00	3	3000
100	2014-10-08 00:00:00	3	1500
101	2014-11-20 00:00:00	2	1560
103	2013-05-20 00:00:00	4	2060

Table 3: employee

eid	ename	job	did	salary
1	arjun	AP	1	10000.00
2	rabi	JP	2	12000.00
3	rohan	AP	2	15000.00
4	krishna	AP	1	20000.00

Table 4: department

did	dname	location
1	accounting	kathmandu
2	sales	patan
3	research	banepa
4	operations	bhaktapur