

The background image is a photograph of a modern office interior, specifically a conference room. It features a long, dark wooden conference table surrounded by several black office chairs. The room has large floor-to-ceiling windows that offer a view of a city skyline. The entire image is overlaid with a semi-transparent orange filter. The text 'SQL Views' is centered in the middle of the image in a white, sans-serif font.

# SQL Views

A modern office interior with large windows and a long conference table. The room is brightly lit, and the view outside the windows shows a cityscape. The text "Using SQL Views" is overlaid in the center of the image.

# Using SQL Views

# Using SQL Views

## view

a virtual table whose contents are obtained from an existing table or tables, called ***base tables***

# Using SQL Views

## view

a virtual table whose contents are obtained from an existing table or tables, called *base tables*

- the retrieval happens through an SQL statement, incorporated into the view

# Using SQL Views

- SQL View

# Using SQL Views

- SQL View

- think of a view object as *a view into the base table*

# Using SQL Views

## ● SQL View

- think of a view object as *a view into the base table*
- the view itself does *not* contain any real data; the data is physically stored in the base table

# Using SQL Views

## ● SQL View

- think of a view object as *a view into the base table*
- the view itself does *not* contain any real data; the data is physically stored in the base table
- the view *simply shows the data* contained in the base table



# Using SQL Views

- SQL View



SQL

```
CREATE VIEW view_name AS  
SELECT  
    column_1, column_2,... column_n  
FROM  
    table_name;
```

# Using SQL Views



# Using SQL Views



# Using SQL Views

```
SELECT
  emp_no, MAX(from_date) AS fr
FROM
  dept_emp
GROUP BY emp_no;
```

```
SELECT
  emp_no, MAX(from_date) AS fr
FROM
  dept_emp
GROUP BY emp_no;
```



```
SELECT
  emp_no, MAX(from_date) AS fr
FROM
  dept_emp
GROUP BY emp_no;
```

```
SELECT
  emp_no, MAX(from_date) AS fr
FROM
  dept_emp
GROUP BY emp_no;
```

```
SELECT
  emp_no, MAX(from_date) AS fr
FROM
  dept_emp
GROUP BY emp_no;
```

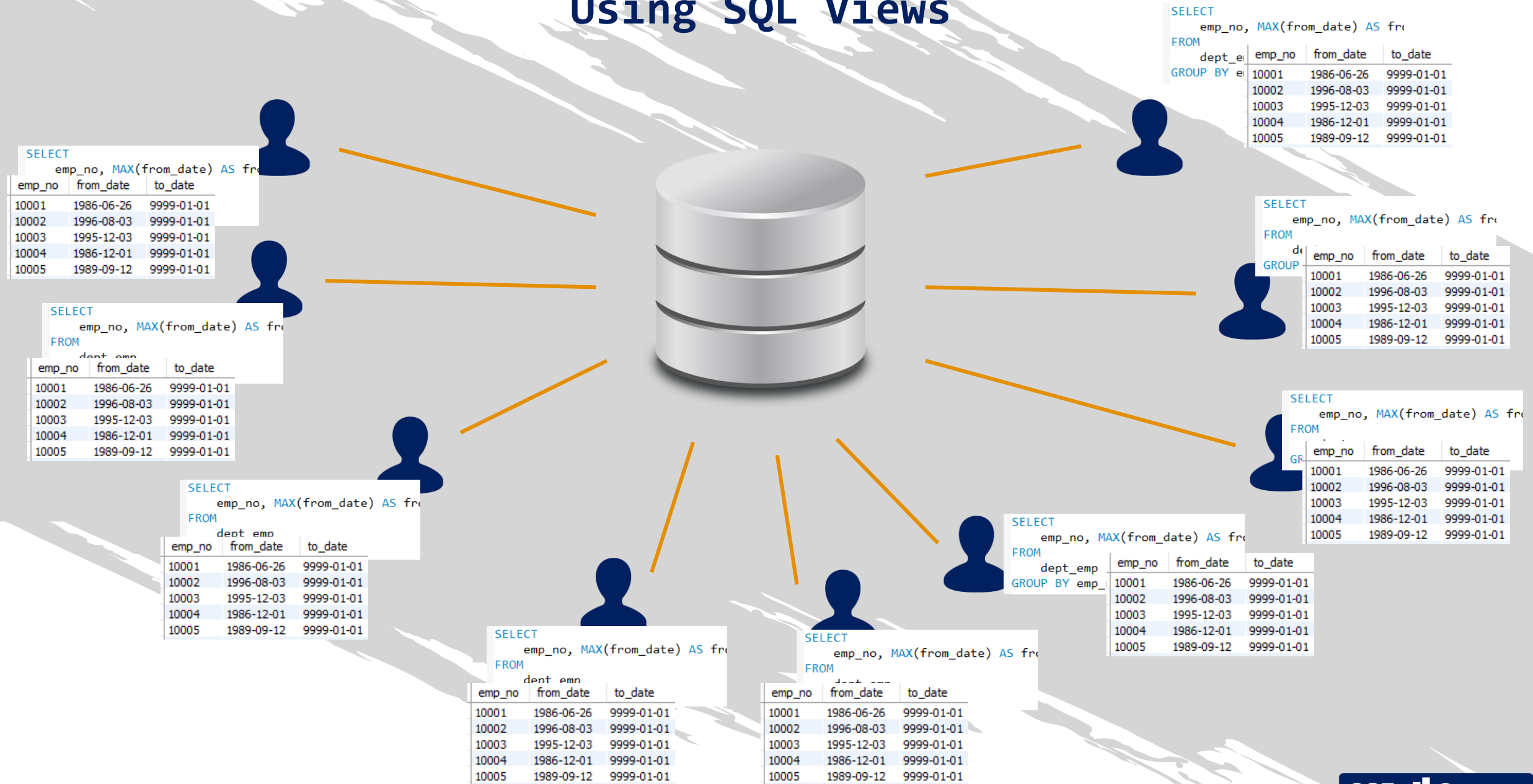
```
SELECT
  emp_no, MAX(from_date) AS fr
FROM
  dept_emp
GROUP BY emp_no;
```

```
SELECT
  emp_no, MAX(from_date) AS fr
FROM
  dept_emp
GROUP BY emp_no;
```

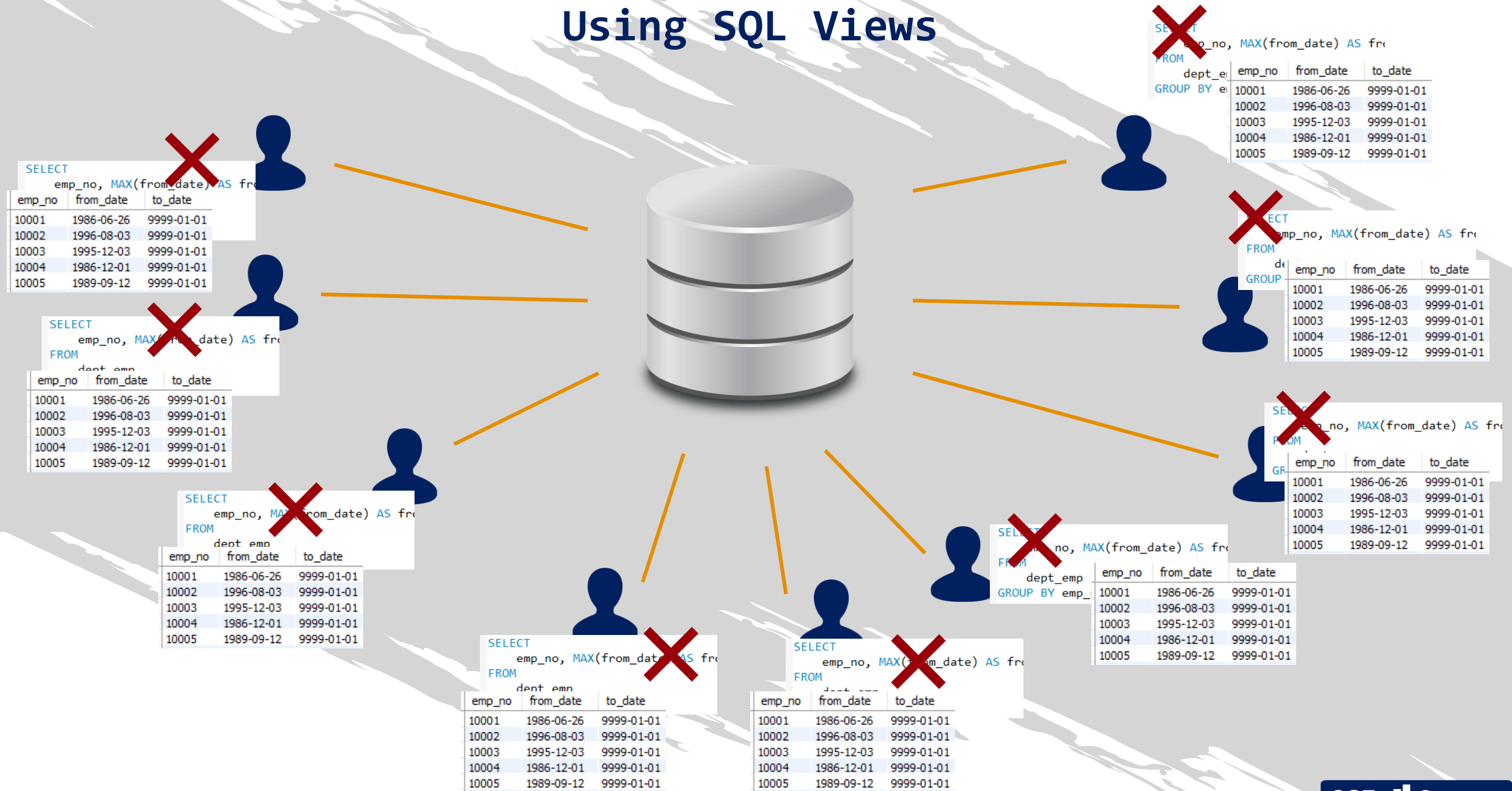
```
SELECT
  emp_no, MAX(from_date) AS fr
FROM
  dept_emp
GROUP BY emp_no;
```

```
SELECT
  emp_no, MAX(from_date) AS fr
FROM
  dept_emp
GROUP BY emp_no;
```

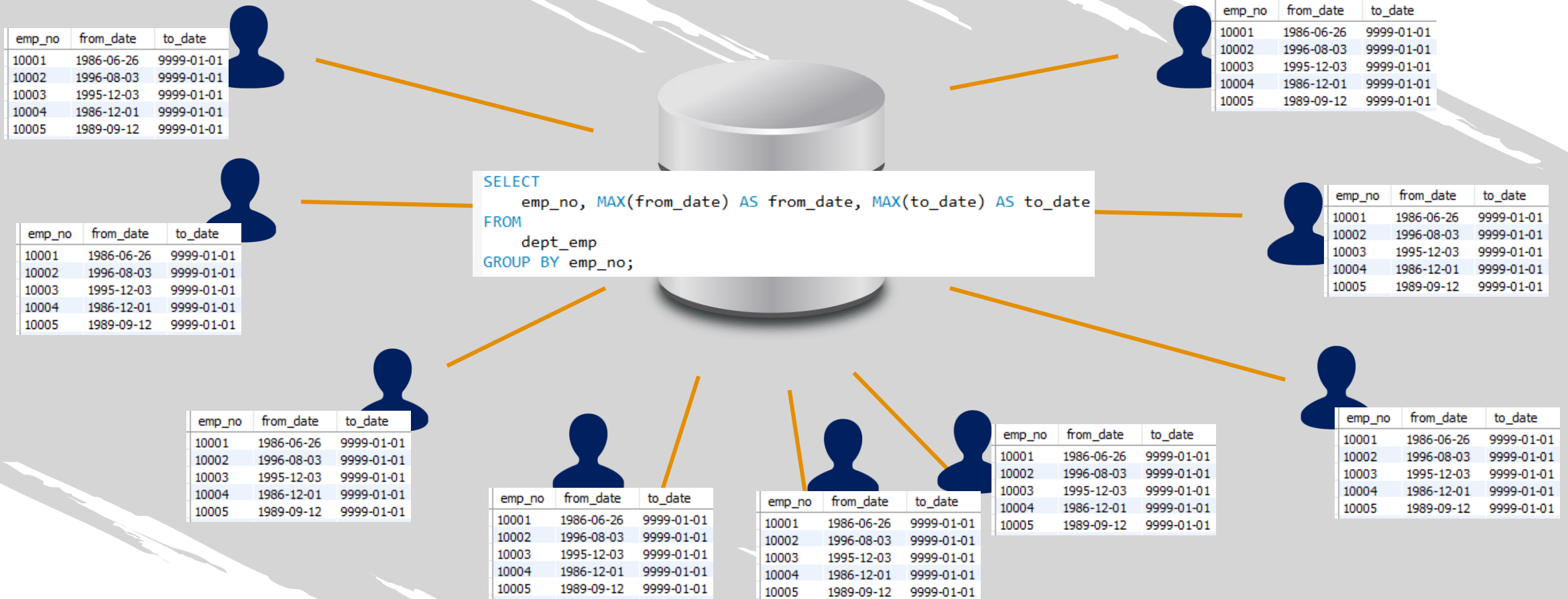
# Using SQL Views



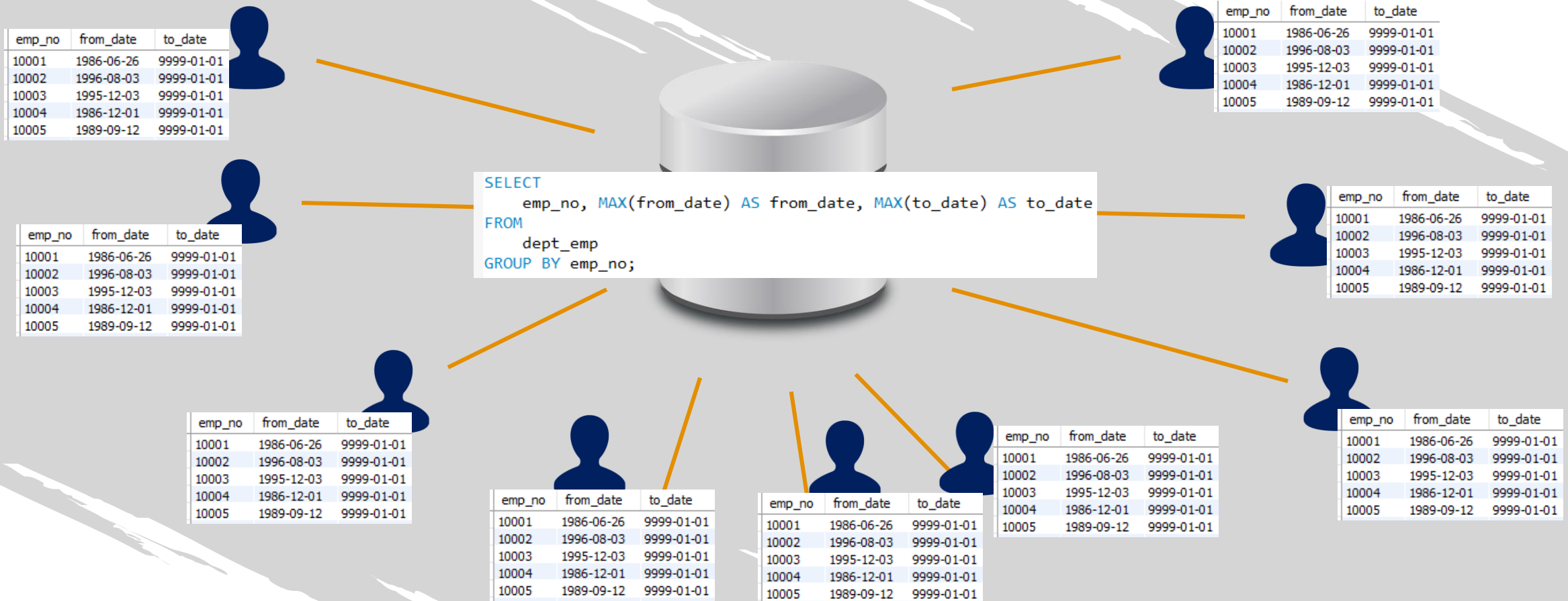
# Using SQL Views



# Using SQL Views



# Using SQL Views



A view acts as a *shortcut* for writing the same SELECT statement every time a new request has been made



# Using SQL Views

- SQL View

- saves a lot of coding time

# Using SQL Views

## ● SQL View

- saves a lot of coding time
- occupies no extra memory

# Using SQL Views

## ● SQL View

- acts as a *dynamic table* because it instantly reflects data and structural changes in the base table

# Using SQL Views

## SQL View

- acts as a *dynamic table* because it instantly reflects data and structural changes in the base table

‘dept\_emp’ (table)

emp_no	dept_no	from_date	to_date
10001	d005	1986-06-26	9999-01-01

# Using SQL Views

## SQL View

- acts as a *dynamic table* because it instantly reflects data and structural changes in the base table

'dept\_emp' (table)

emp_no	dept_no	from_date	to_date
10001	d005	1986-06-26	9999-01-01



'dept\_emp' (view)

emp_no	dept_no	from_date	to_date
10001	d005	1986-06-26	9999-01-01

# Using SQL Views

## SQL View

- acts as a *dynamic table* because it instantly reflects data and structural changes in the base table

‘dept\_emp’ (table)

emp_no	dept_no	from_date	to_date
10001	d005	1986-06-26	9999-01-01

# Using SQL Views

## SQL View

- acts as a *dynamic table* because it instantly reflects data and structural changes in the base table

‘dept\_emp’ (table)

emp_no	dept_no	from_date	to_date
10001	d005	1986-06-26	2025-06-05

# Using SQL Views

## SQL View

- acts as a *dynamic table* because it instantly reflects data and structural changes in the base table

'dept\_emp' (table)

emp_no	dept_no	from_date	to_date
10001	d005	1986-06-26	2025-06-05



'dept\_emp' (view)

emp_no	dept_no	from_date	to_date
10001	d005	1986-06-26	9999-01-01



# Using SQL Views

## SQL View

- acts as a *dynamic table* because it instantly reflects data and structural changes in the base table

'dept\_emp' (table)

emp_no	dept_no	from_date	to_date
10001	d005	1986-06-26	2025-06-05



'dept\_emp' (view)

emp_no	dept_no	from_date	to_date
10001	d005	1986-06-26	2025-06-05

# Using SQL Views

- SQL Views

# Using SQL Views

- SQL Views

Don't forget they are not real, physical data sets, meaning we cannot insert or update the information that has already been extracted.

# Using SQL Views

## ● SQL Views

Don't forget they are not real, physical data sets, meaning we cannot insert or update the information that has already been extracted.

- they should be seen as *temporary virtual data tables* retrieving information from base tables