



view

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

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

SQL View

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

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- the view itself does *not* contain any real data; the data is physically stored in the base table

- 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

```
CREATE VIEW view_name AS

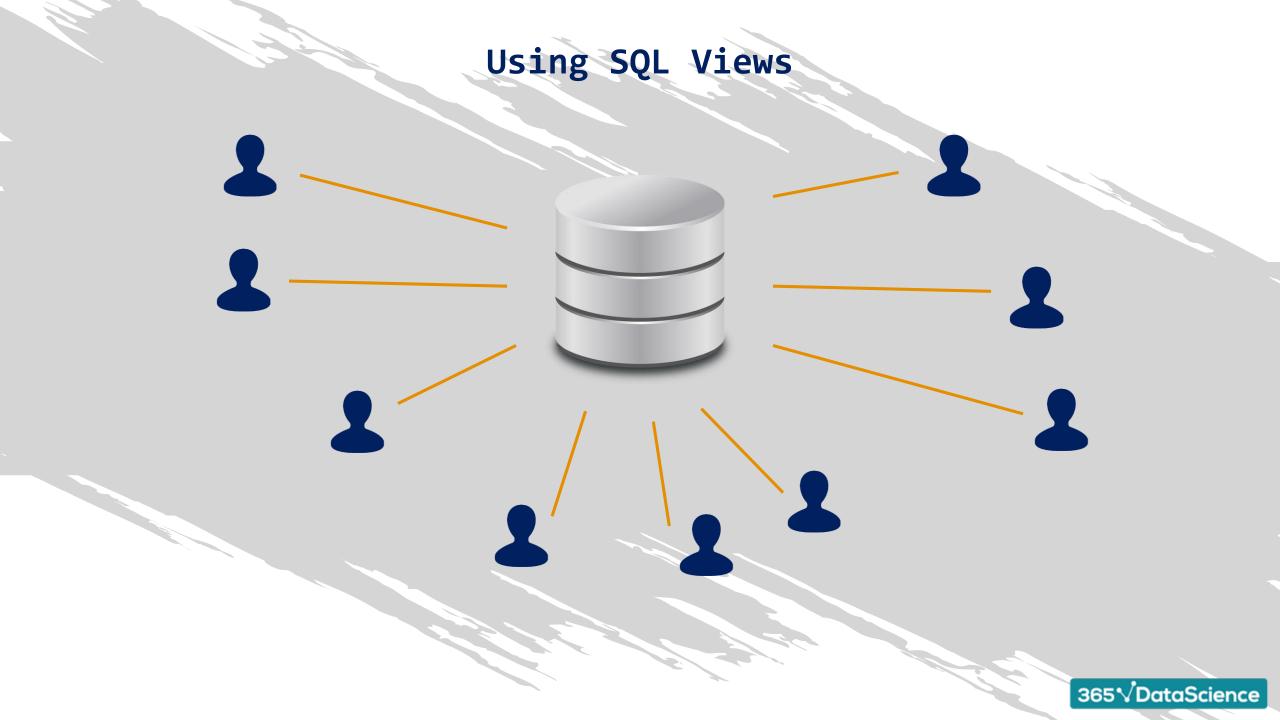
SELECT

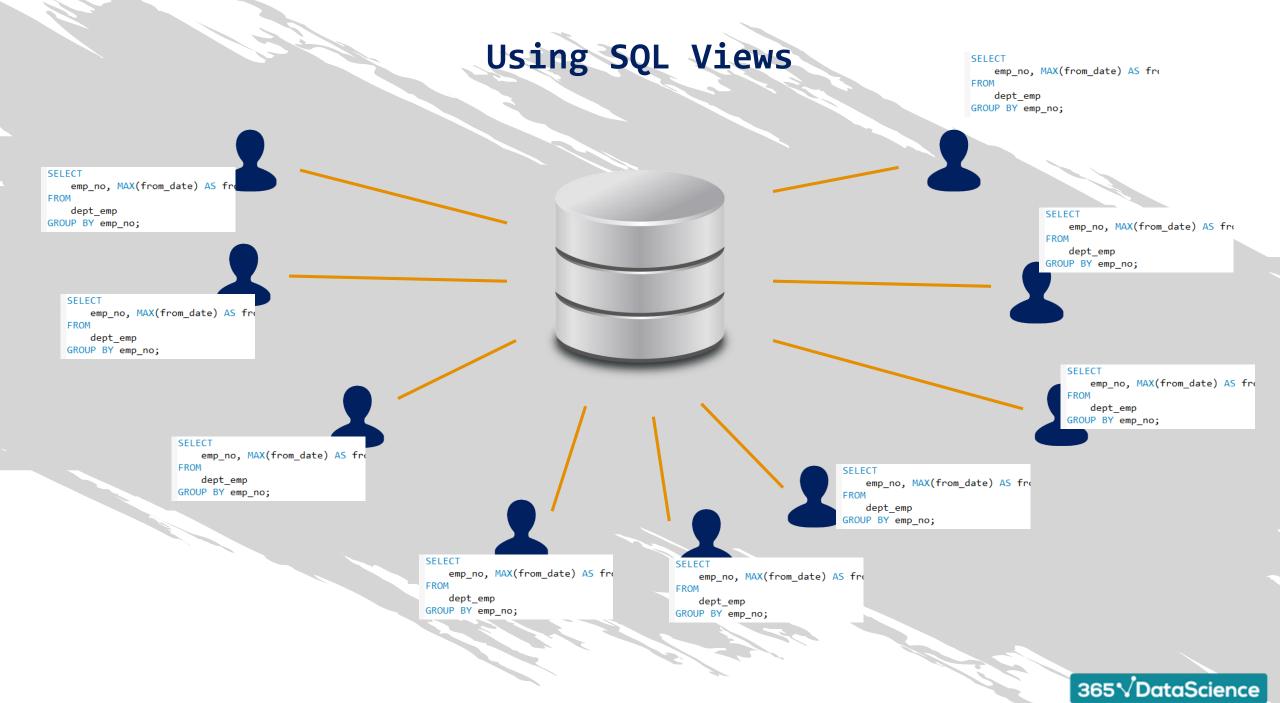
SQL column_1, column_2,... column_n

FROM

table_name;
```









SELECT emp_no, MAX(from_date) AS from_date emp_no from_date to_date GROUP BY e 10001 1986-06-26 9999-01-01 1996-08-03 9999-01-01 1995-12-03 9999-01-01 1986-12-01 9999-01-01 1989-09-12 9999-01-01

SELECT

emp_no, MAX(from_date) AS from_date FROM

de IP -	emp_no	from_date	to_date
,,	10001	1986-06-26	9999-01-01
	10002	1996-08-03	9999-01-01
	10003	1995-12-03	9999-01-01
	10004	1986-12-01	9999-01-01
	10005	1989-09-12	9999-01-01

emp_no, MAX(from_date) AS from_date

emp_no from_date to_date

10001	1986-06-26	9999-01-01
10002	1996-08-03	9999-01-01
10003	1995-12-03	9999-01-01
10004	1986-12-01	9999-01-01
10005	1989-09-12	9999-01-01

emp_no, MAX(from_date) AS from_date

dept emp GROUP BY emp

emp_no	from_date	to_date
 10001	1986-06-26	9999-01-01
10002	1996-08-03	9999-01-01
10003	1995-12-03	9999-01-01
10004	1986-12-01	9999-01-01
10005	1989-09-12	9999-01-01

SELECT	-		
em	ip_no, MAX(from_date)	AS from
emp_no	from_date	to_date	
10001	1986-06-26	9999-01-01	
10002	1996-08-03	9999-01-01	
10003	1995-12-03	9999-01-01	
10004	1986-12-01	9999-01-01	

1989-09-12 9999-01-01

SELECT

emp_no, MAX(from_date) AS from_date FROM

dont omn

emp_no	from_date	to_date
10001	1986-06-26	9999-01-01
10002	1996-08-03	9999-01-01
10003	1995-12-03	9999-01-01
10004	1986-12-01	9999-01-01
10005	1989-09-12	9999-01-01

SELECT

emp_no, MAX(from_date) AS from_ FROM

dept emp emp_no from_date to_date 9999-01-01 1996-08-03 9999-01-01 1995-12-03 9999-01-01 1986-12-01 9999-01-01 1989-09-12 9999-01-01

	SELECT				
	emp_no,	MAX(from_	_date)	AS	f
۹	FROM				

emp_no	from_date	to_date
10001	1986-06-26	9999-01-01
10002	1996-08-03	9999-01-01
10003	1995-12-03	9999-01-01
10004	1986-12-01	9999-01-01
10005	1989-09-12	9999-01-01

SELECT			
emp_no,	MAX(from_date)	AS	fı

emp_no	from_date	to_date
10001	1986-06-26	9999-01-01
10002	1996-08-03	9999-01-01
10003	1995-12-03	9999-01-01
10004	1986-12-01	9999-01-01
10005	1989-09-12	9999-01-01





no, MAX(from_date) AS fro

dept_e	emp_no	from_date	to_date
GROUP BY e	10001	1986-06-26	9999-01-01
	10002	1996-08-03	9999-01-01
	10003	1995-12-03	9999-01-01
	10004	1986-12-01	9999-01-01
	10005	1000 00 12	0000 01 01

np_no, MAX(from_date) AS fro

ut ID	emp_no	from_date	to_date
	10001	1986-06-26	9999-01-01
	10002	1996-08-03	9999-01-01
	10003	1995-12-03	9999-01-01
	10004	1986-12-01	9999-01-01
	10005	1989-09-12	9999-01-01

_no, MAX(from_date) AS fro 9999-01-01 10003 9999-01-01 9999-01-01

1989-09-12 9999-01-01

1989-09-12 9999-01-01

MAX(from_date) AS from_

ept emp	emp_no	from_date	to_date
BY emp_	10001	1986-06-26	9999-01-0
	10002	1996-08-03	9999-01-0
	10003	1995-12-03	9999-01-0
	10004	1986-12-01	9999-01-0

1989-09-12 9999-01-01



1989-09-12 9999-01-01

to_date 9999-01-01

9999-01-01 9999-01-01

9999-01-01

	emp_no	from_date	to_date
l	10001	1986-06-26	9999-01-01
	10002	1996-08-03	9999-01-01
	10003	1995-12-03	9999-01-01
	10004	1986-12-01	9999-01-01
	10005	1989-09-12	9999-01-01

emp_no, MAX(from_date) from_date

1986-06-26

1996-08-03

1995-12-03

1986-12-01

SELECT

10002

10003

10004

10005

	dept emp				
	emp_no	from_date	to_date		
4	10001	1986-06-26	9999-01-01		
ì	10002	1996-08-03	9999-01-01		
٦.	10003	1995-12-03	9999-01-01		
	10004	1986-12-01	9999-01-01		
	10005	1989-09-12	9999-01-01		

SELECT		\mathbf{V}		
emp_no,	MAX(from_dat	$\overline{\mathcal{A}}$	45	fr
FROM			•	

	dent emn	
emp_no	from_date	to_date
10001	1986-06-26	9999-01-01
10002	1996-08-03	9999-01-01
10003	1995-12-03	9999-01-01
10004	1986-12-01	9999-01-01
10005	1989-09-12	9999-01-01

	- 110	OFF		
	emp_no	from_date	to_date	
	10001	1986-06-26	9999-01-01	
	10002	1996-08-03	9999-01-01	-
٦.	10003	1995-12-03	9999-01-01	
	10004	1986-12-01	9999-01-01	

1989-09-12 9999-01-01

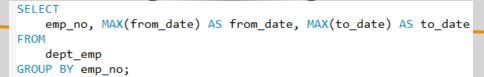
10005

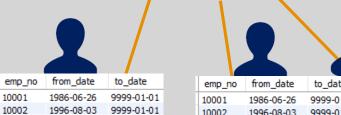
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emp_no	from_date	to_date
10001	1986-06-26	9999-01-01
10002	1996-08-03	9999-01-01
10003	1995-12-03	9999-01-01
10004	1986-12-01	9999-01-01
10005	1989-09-12	9999-01-01





9999-01-01

9999-01-01

1989-09-12 9999-01-01

1995-12-03

1986-12-01

10003

10005

	No.		
	emp_no	from_date	to_date
	10001	1986-06-26	9999-01-01
	10002	1996-08-03	9999-01-01
Š	10003	1995-12-03	9999-01-01
	10004	1986-12-01	9999-01-01
	10005	1989-09-12	9999-01-01

emp_no	from_date	to_date
10001	1986-06-26	9999-01-01
10002	1996-08-03	9999-01-01
10003	1995-12-03	9999-01-01
10004	1986-12-01	9999-01-01
10005	1989-09-12	9999-01-01

to_date

9999-01-01

9999-01-01 9999-01-01

1986-12-01 9999-01-01

1989-09-12 9999-01-01

emp_no

10001

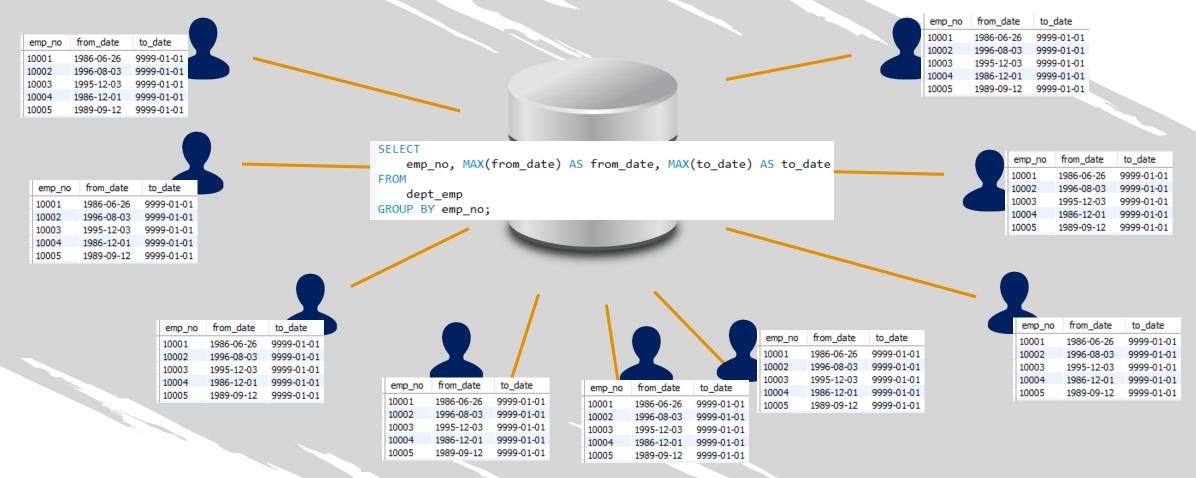
10002

from_date

emp_no	from_date	to_date
10001	1986-06-26	9999-01-01
10002	1996-08-03	9999-01-01
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A view acts as a *shortcut* for writing the same SELECT statement every time a new request has been made

SQL View

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- occupies no extra memory

SQL View

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

SQL View

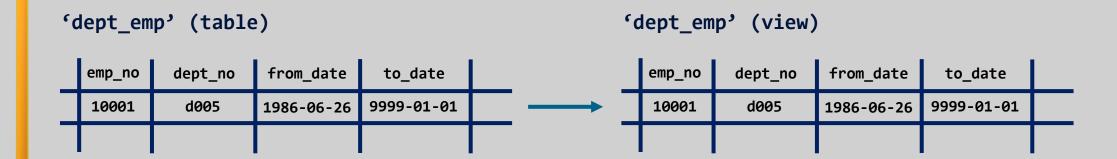
- acts as a *dynamic table* because it instantly reflects data and structural changes in the base table

'dept_emp' (table)

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

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

SQL View

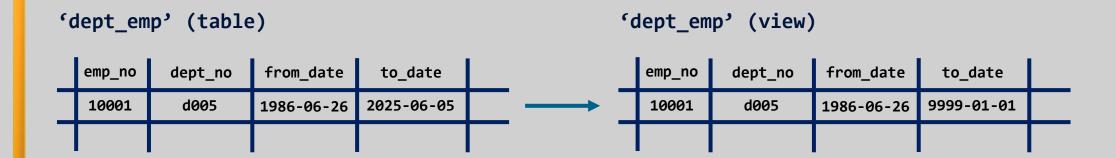
- acts as a *dynamic table* because it instantly reflects data and structural changes in the base table

'dept_emp' (table)

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

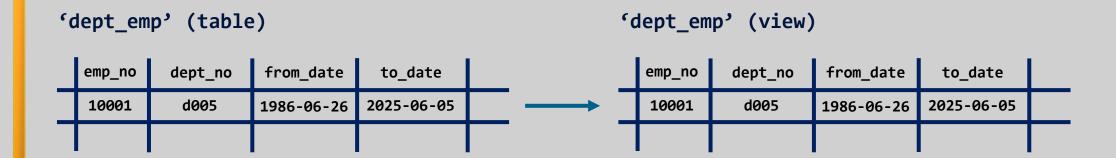
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SQL Views

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

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