



SQL view

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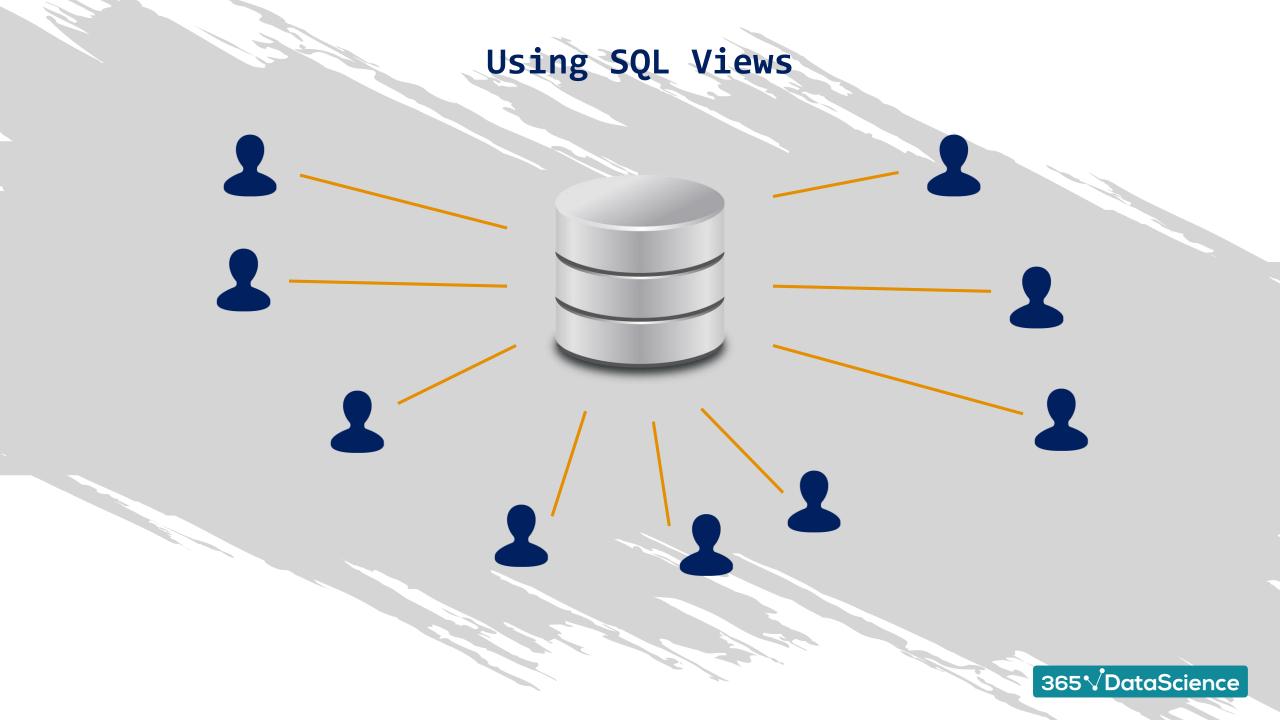
- the retrieval happens through an SQL statement, incorporated into the view

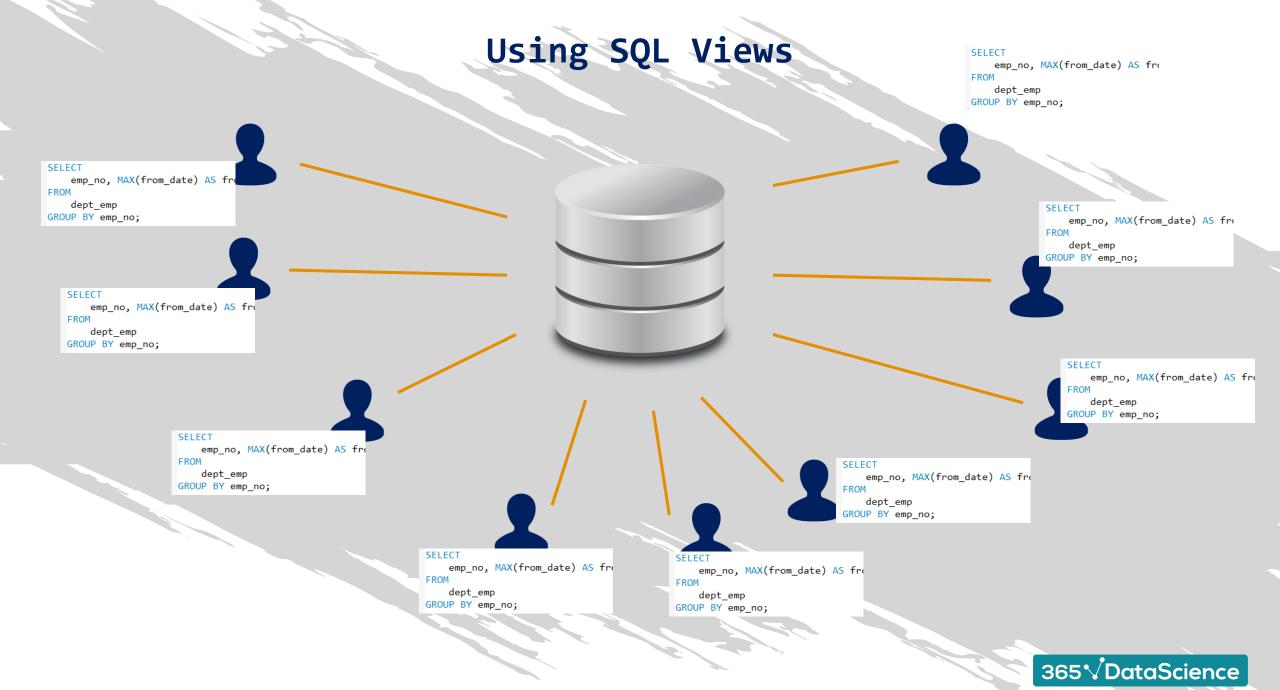
SQL View

- 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

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- 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







SELECT emp_no, MAX(from_date) AS from_date from_date to_date GROUP BY e 10001 9999-01-01 1986-06-26 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

ь.	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_date emp_no

10001	1900-00-20	3333-01-01
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 FROM

d€ JP -	emp_no	from_date	to_date
JF -	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
	10005	1989-09-12	9999-01-0

1989-09-12 9999-01-01

Л			
dept emp	emp_no	from_date	to_date
JP BY emp_	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

de - ROUP	emp_no	from_date	to_date
OUF -	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
	10000	1000 00 12	00000.01.0

ECT				10004	1986-12-
emp_no, MA	X(from_c		10005	1989-09	
M	_				
dept emp	emp_no	from_date	to_date		
		1986-06-26		L	

emp_no, MAX(from_date) AS from_

SELECT

GROUP BY em

	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
	10005	1989-09-12	9999-01-01

SELECT 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
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10005	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_date FROM

	dept emp					
	emp_no	from_date	to_date			
1	10001	1986-06-26	9999-01-01			
ì	10002	1996-08-03	9999-01-01			
١.	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

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		







dept_e	emp_no	from_date	to_date
OUP BY e	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
	10005	1000 00 10	00000 04 0

mp_no, MAX(from_date) AS fro

d∈ P⊸	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

SET ___no, MAX(from_date) AS from_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

1989-09-12 9999-01-01

F	OM	,(
GR-	emp_no	from_date	to_date
di	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



FR.M	_
dept emp	emp_no
GROUP BY emp_	10001

	emp_no	Irom_date	to_date
ĺ	10001	1986-06-26	9999-01-01
i	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

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Using SQL	VIEWS
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SELECT emp_no, MAX(from_date) emp_no from_date to_date 1986-06-26 9999-01-01

	2000 00 20	
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

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

	dept emp				
	emp_no	from_date	to_date		
1	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		

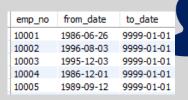
SELECT		
emp_no,	MAX(from_dateAS fr	٩
FROM		

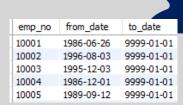
	dent emn	
emp_no	from_date	to_date
10001	1986-06-26	9999-01-01
10002	1996-08-03	9999-01-01
10003	1995-12-03	9999-01-01
10004	1986-12-01	9999-01-01
10005	1989-09-12	9999-01-01

SELECT			
emp_no,	MAX(m_date)	AS	fı
FROM			

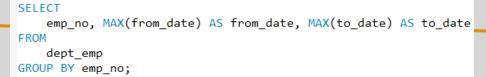
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emp_no	from_date	to_date
10001	1986-06-26	9999-01-01
10002	1996-08-03	9999-01-01
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10004	1986-12-01	9999-01-01
10005	1989-09-12	9999-01-01





1995-12-03

1986-12-01

10003

10005

9999-01-01

9999-01-01

1989-09-12 9999-01-01

<u> </u>		
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

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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

9999-01-01

emp_no

10001

from_date

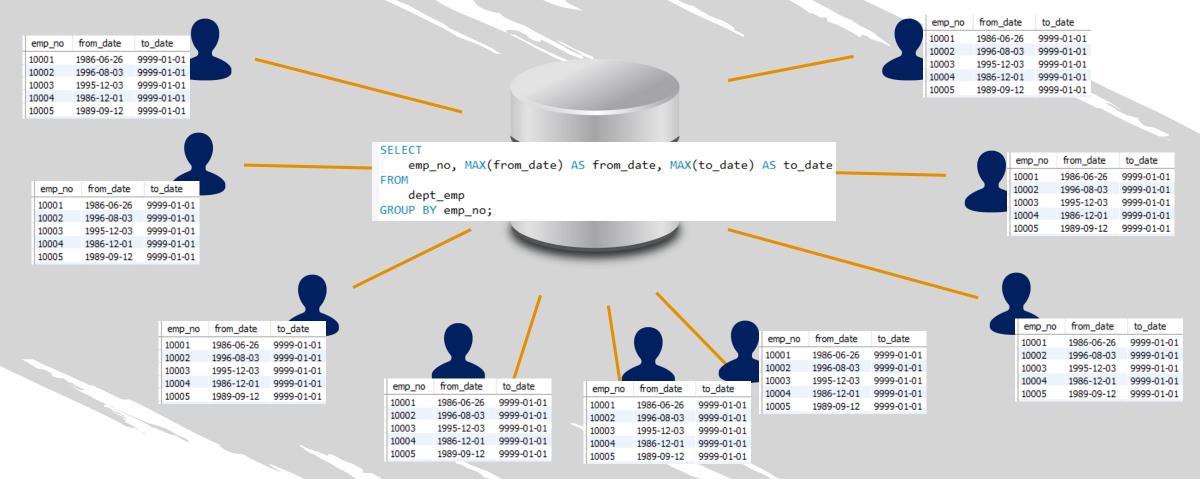
1986-12-01

1989-09-12 9999-01-01

emp_no	from_date	to_date
10001	1986-06-26	9999-01-01
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10003	1995-12-03	9999-01-01
10004	1986-12-01	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

- saves a lot of coding time

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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

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'dept_emp' (table)

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) 'v_dept_emp' (view) emp_no dept_no from_date dept_no from_date to_date to date emp_no 1986-06-26 9999-01-01 9999-01-01 10001 d005 10001 d005 1986-06-26

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

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'dept_emp' (table)

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

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'dept_emp' (table) 'v_dept_emp' (view) emp_no dept_no from_date dept_no from_date to_date to date emp_no 1986-06-26 2025-06-05 2025-06-05 10001 d005 10001 d005 1986-06-26



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