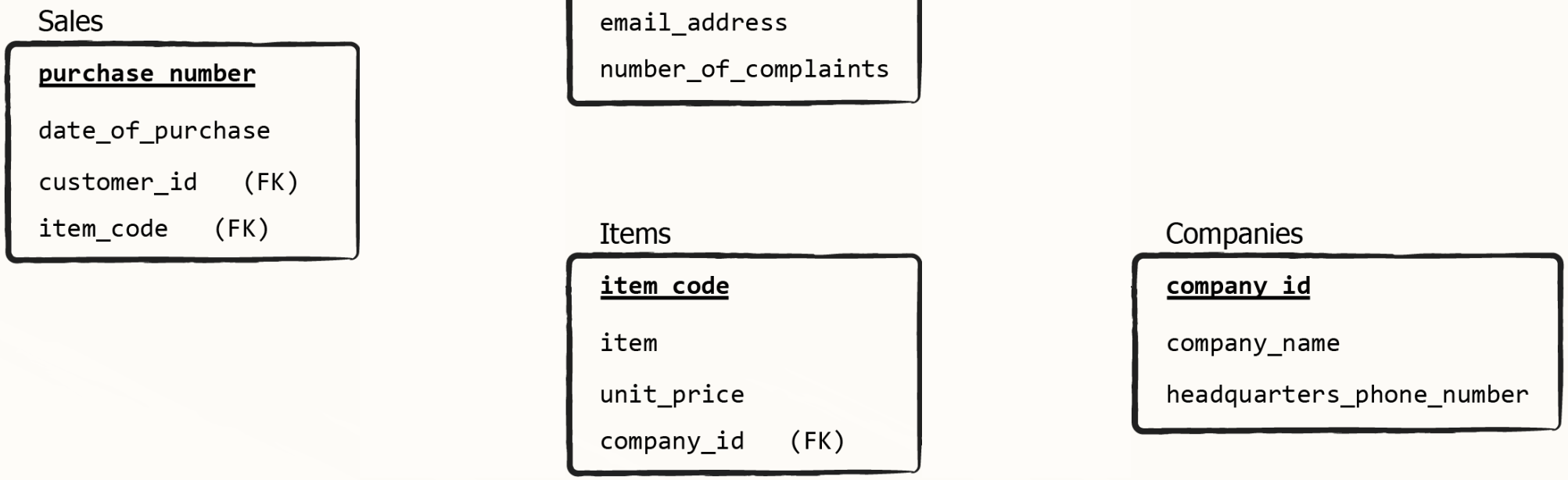
FOREIGN KEY Constraint

365 Careers

FOREIGN KEY Constraint

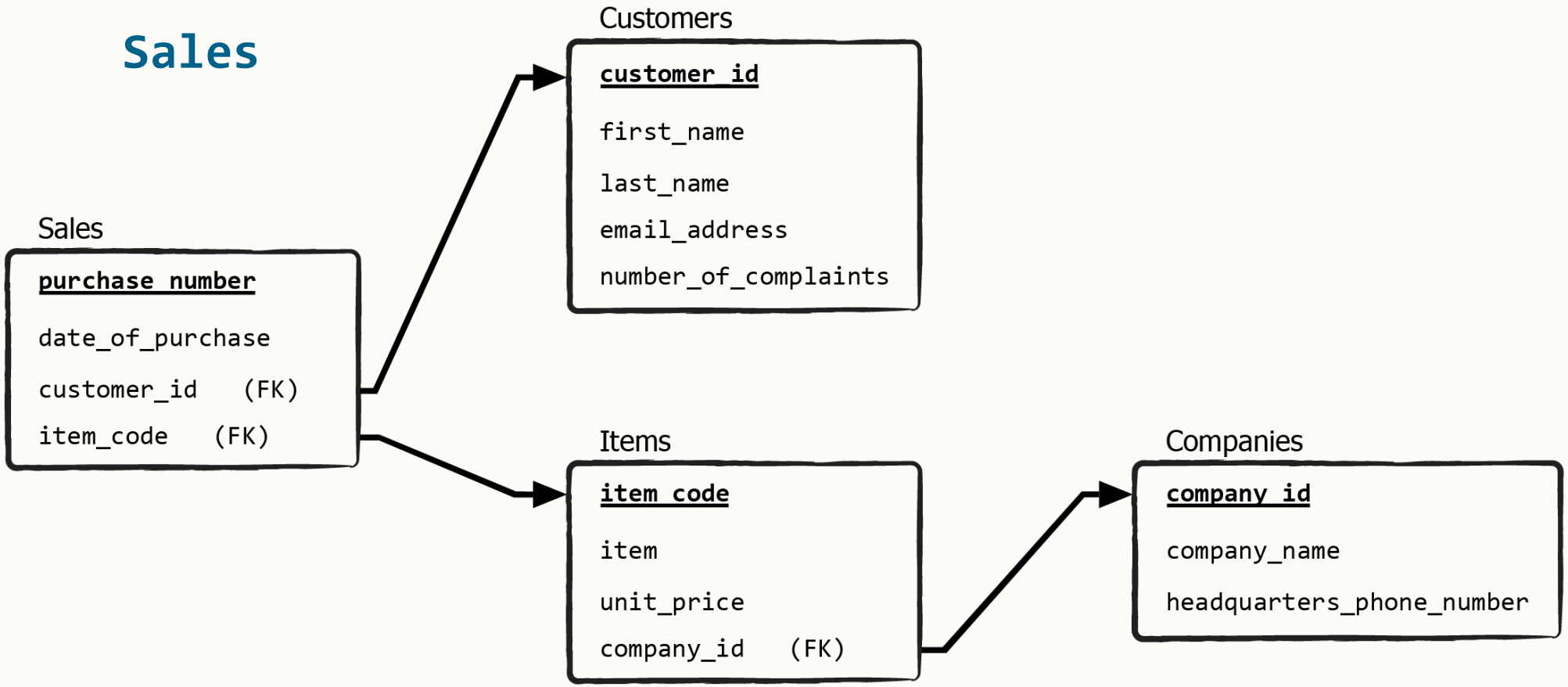
Sales



365 Careers

FOREIGN KEY Constraint

Sales



365 Careers

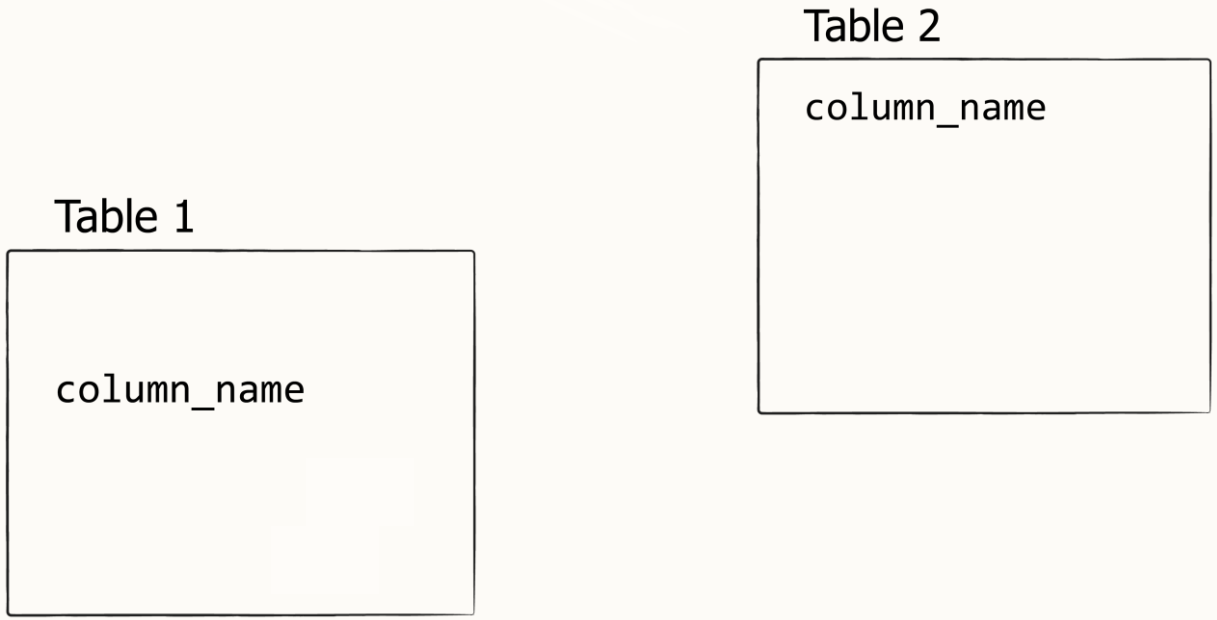
FOREIGN KEY Constraint

foreign key

points to a column of another table and, thus, links the two tables

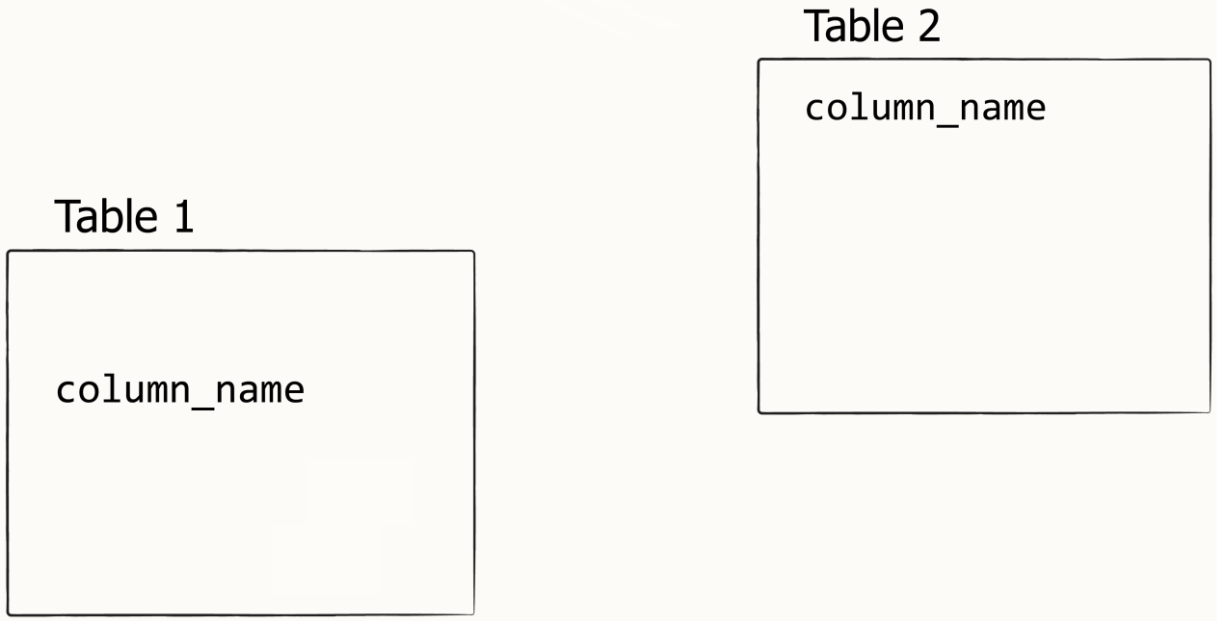
365 Careers

FOREIGN KEY Constraint



365 Careers

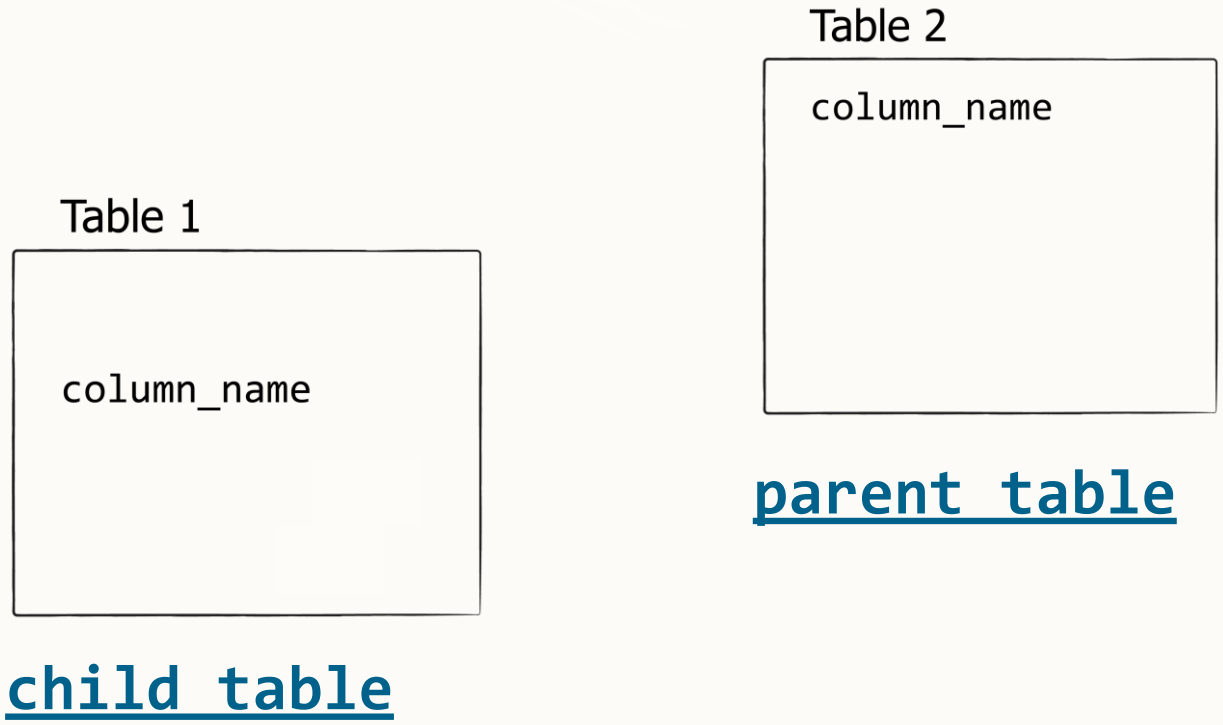
FOREIGN KEY Constraint



child table

365 Careers

FOREIGN KEY Constraint

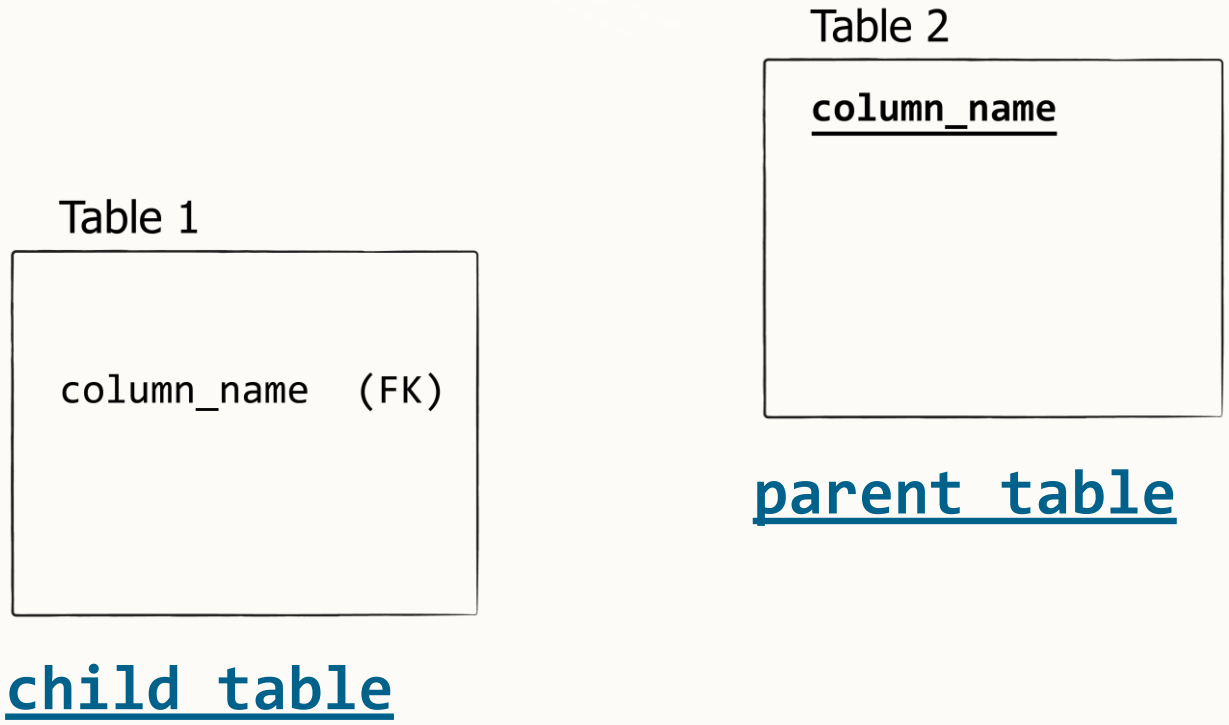


child table

parent table

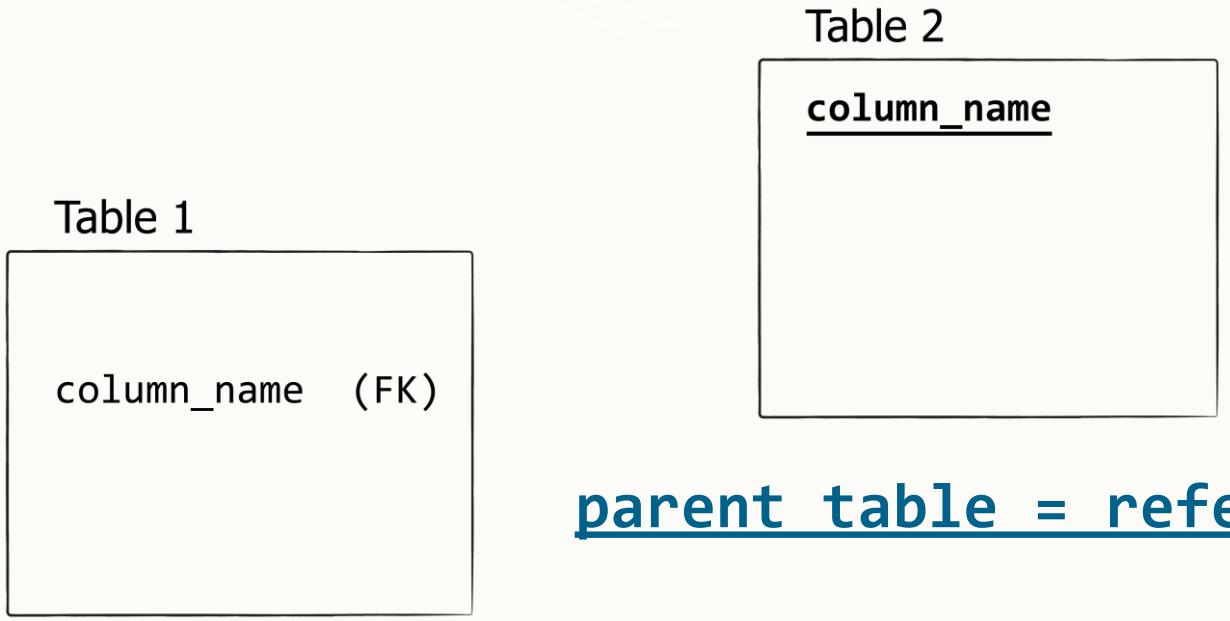
365 Careers

FOREIGN KEY Constraint



365 Careers

FOREIGN KEY Constraint



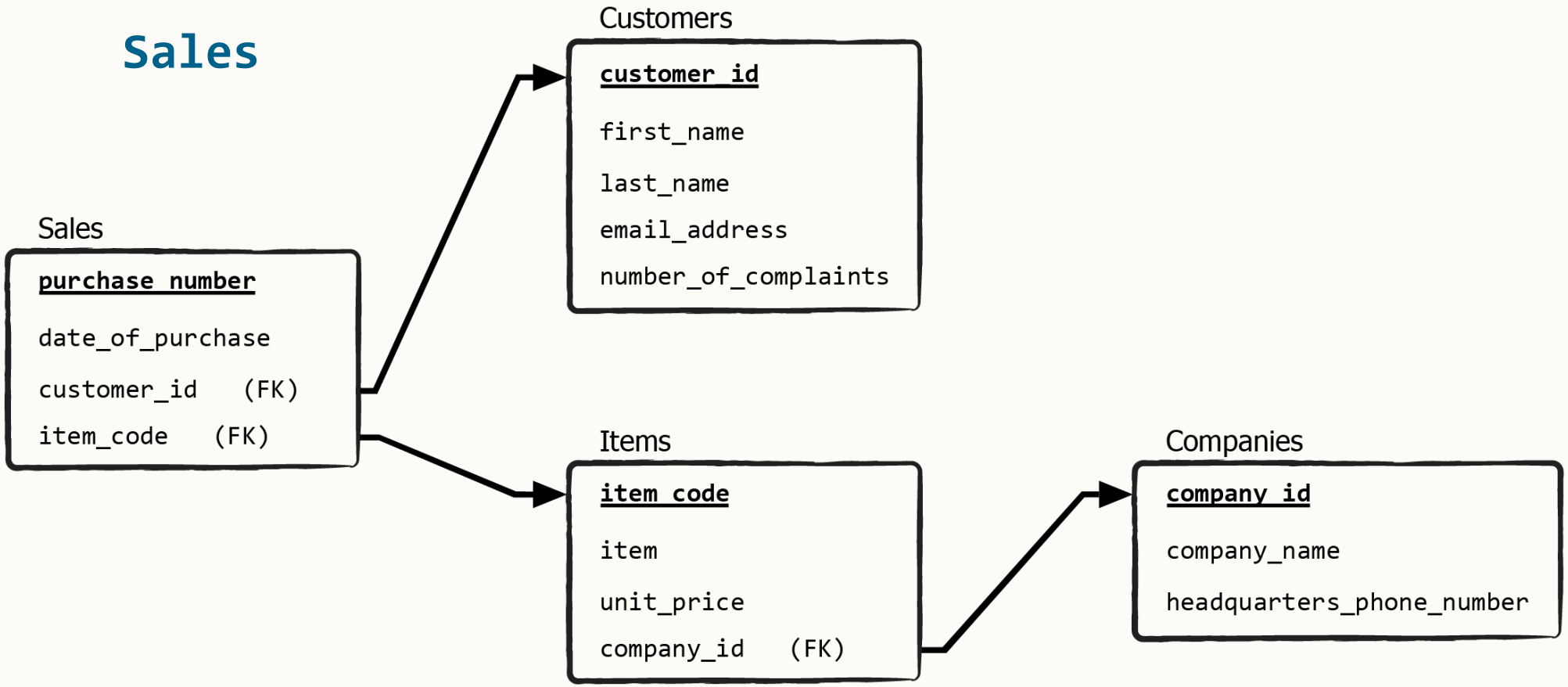
parent table = referenced table

child table = referencing table

365 Careers

FOREIGN KEY Constraint

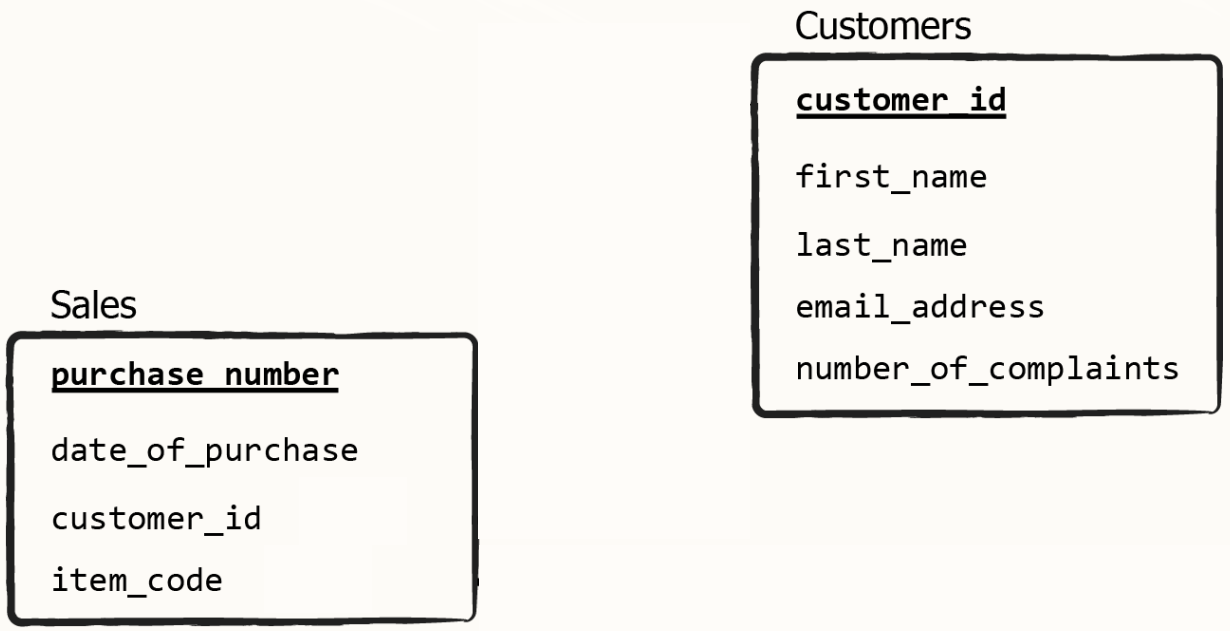
Sales



365 Careers

FOREIGN KEY Constraint

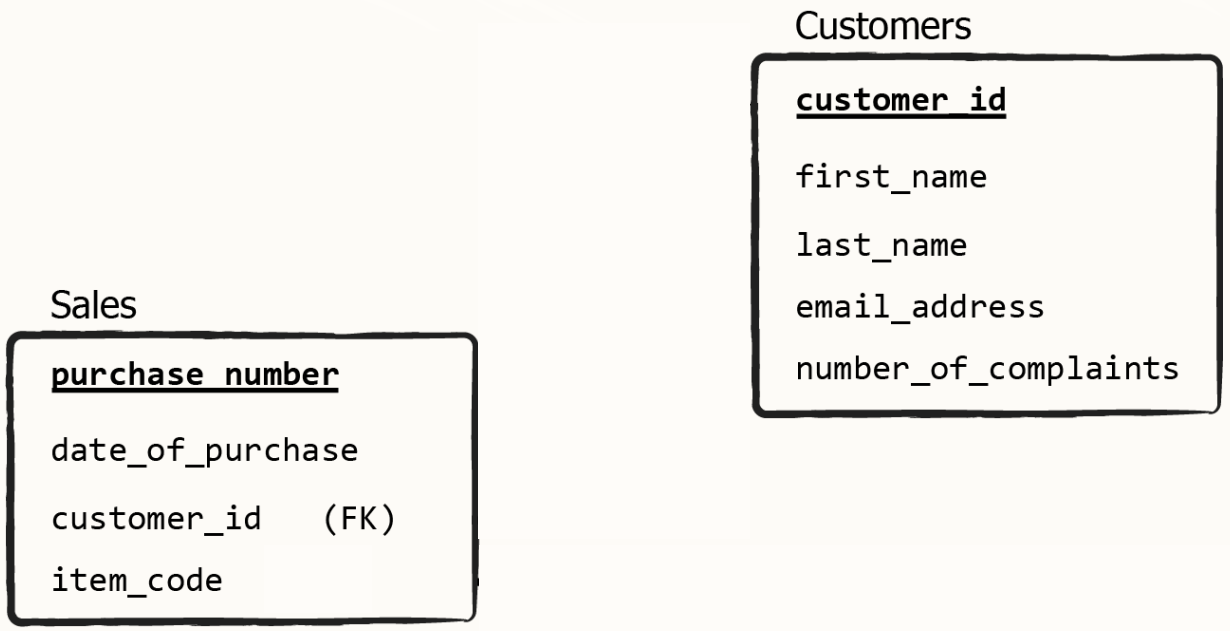
Sales



365 Careers

FOREIGN KEY Constraint

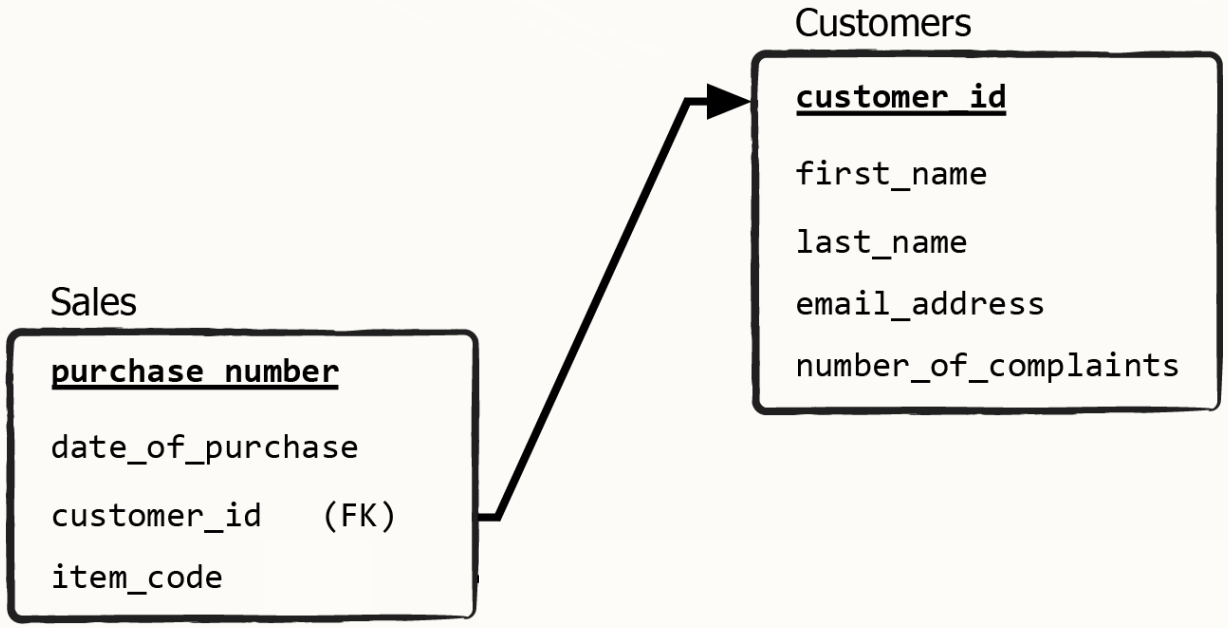
Sales



365 Careers

FOREIGN KEY Constraint

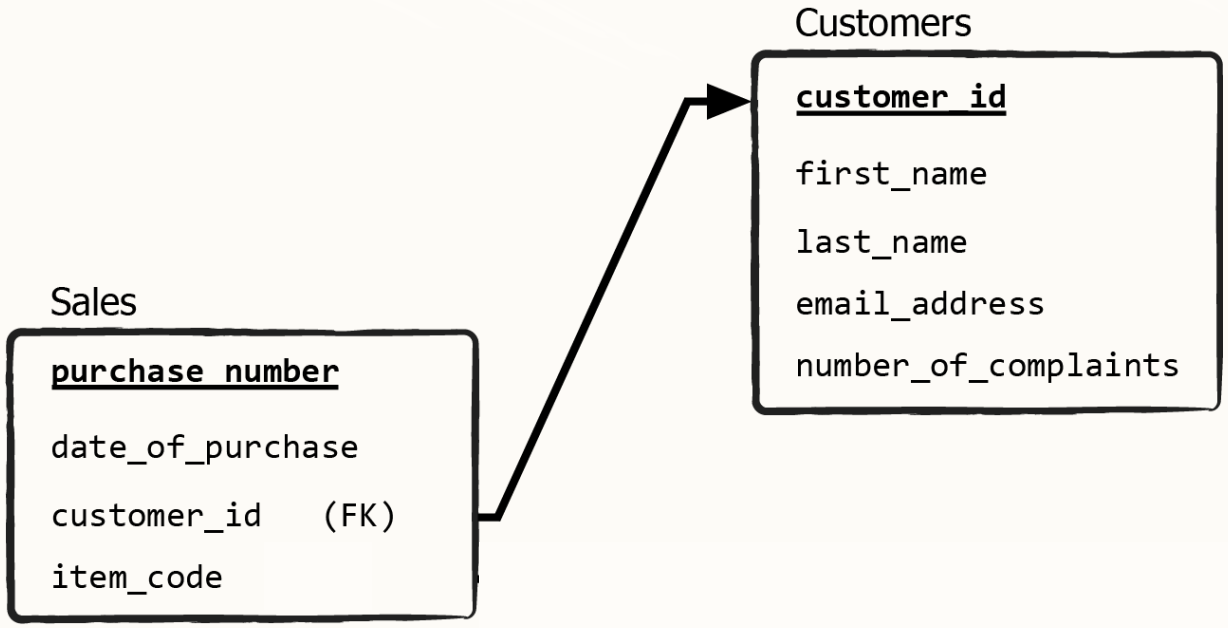
Sales



365 Careers

FOREIGN KEY Constraint

Sales

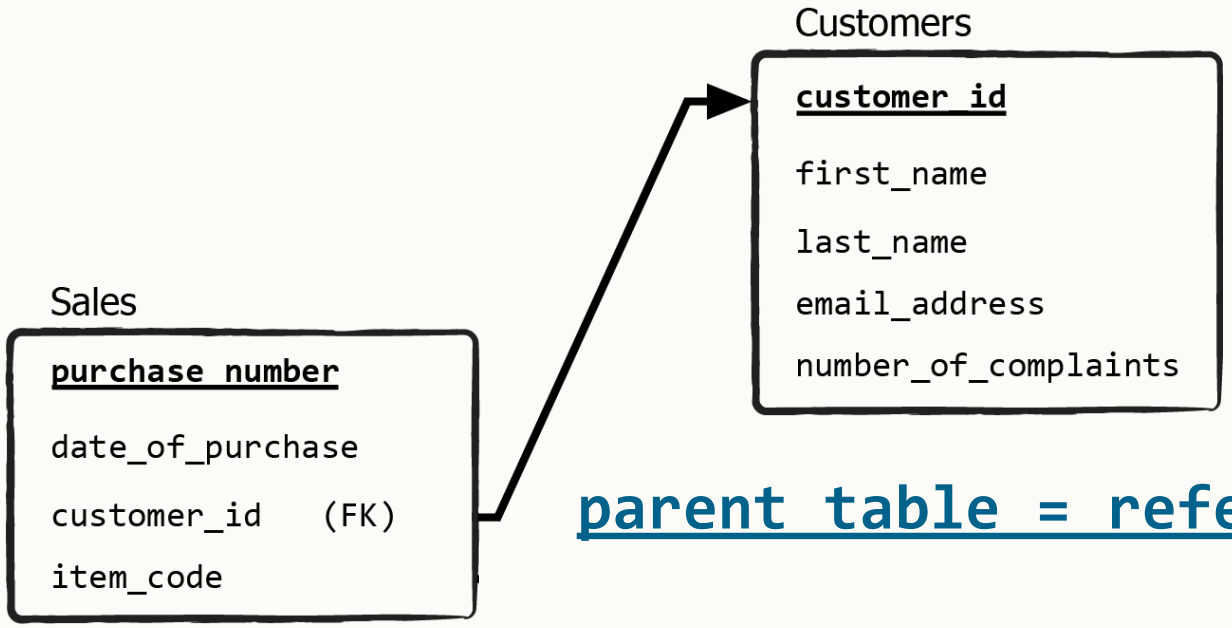


Remember, this is not an obligatory requirement – these two keys may have two completely different names. What's important is that the data types and the information match! It's just common practice to use, if not the same, then similar names for both keys.

365 Careers

FOREIGN KEY Constraint

Sales



parent table = referenced table

child table = referencing table

365 Careers

FOREIGN KEY Constraint

- a *foreign key* in SQL is defined through a foreign key constraint

365 Careers

FOREIGN KEY Constraint

- a *foreign key* in SQL is defined through a foreign key constraint

  the foreign key maintains the *referential integrity* within the database

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FOREIGN KEY Constraint

ON DELETE CASCADE

if a specific value *from the parent table's primary key* has been deleted, all the records *from the child table* referring to this value will be removed as well

365 Careers

FOREIGN KEY Constraint

Customers				
customer_id	first_name	last_name	email_address	number_of_complaints
1	John	McKinley	john.mackinley@365careers.com	0
2	Elizabeth	McFarlane	e.mcfarlane@365careers.com	2
3	Kevin	Lawrence	kevin.lawrence@365careers.com	1
4	Catherine	Winnfield	c.winnfield@365careers.com	0

Sales			
purchase_number	date_of_purchase	customer_id	item_code
1	9/3/2016	1	A_1
2	12/2/2016	2	C_1
3	4/15/2017	3	D_1
4	5/24/2017	1	B_2
5	5/25/2017	4	B_2
6	6/6/2017	2	B_1
7	6/10/2017	4	A_2
8	6/13/2017	3	C_1
9	7/20/2017	1	A_1
10	8/11/2017	2	B_1

FOREIGN KEY Constraint

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5	5/25/2017		B_2
6	6/6/2017	2	B_1
7	6/10/2017	4	A_2
8	6/13/2017	3	C_1
9	7/20/2017	1	A_1
10	8/11/2017	2	B_1

365 Careers

FOREIGN KEY Constraint

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5	5/25/2017	4	B_2
6	6/6/2017	2	B_1
7	6/10/2017	4	A_2
8	6/13/2017	3	C_1
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365 Careers

FOREIGN KEY Constraint

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ON DELETE CASCADE

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1	9/3/2016	1	A_1
2	12/2/2016	2	C_1
3	4/15/2017	3	D_1
4	5/24/2017	1	B_2
6	6/6/2017	2	B_1
8	6/10/2017	3	C_1
9	7/20/2017	1	A_1
10	8/11/2017	2	B_1

365 Careers