Database Table References

Database table references

Recall: relationship types

One-to-one
One-to-many (or many-to-one)
Many-to-many

Foreign Key:

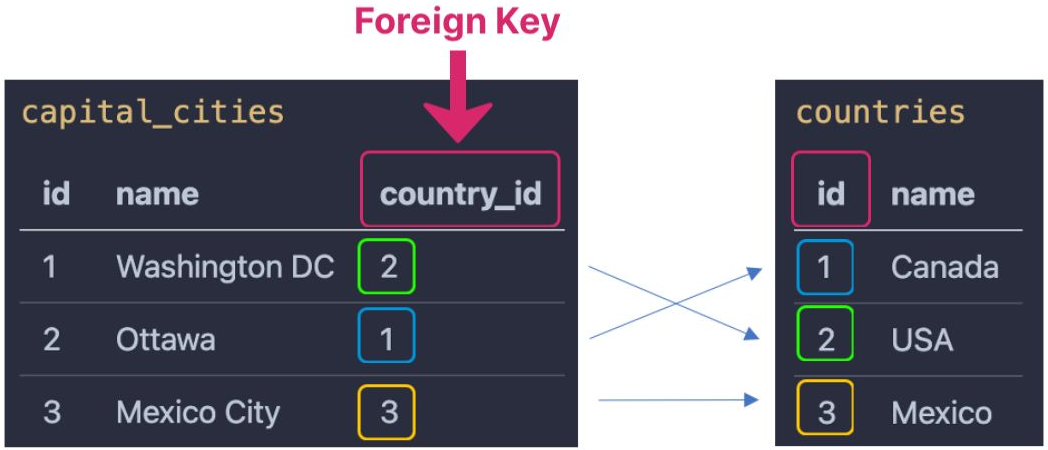
A set of columns in a table that refers to the primary key of another table

Each relationship has a different set of requirements for a foreign key

One-to-One

Requires a unique, non-nullable foreign key on one table

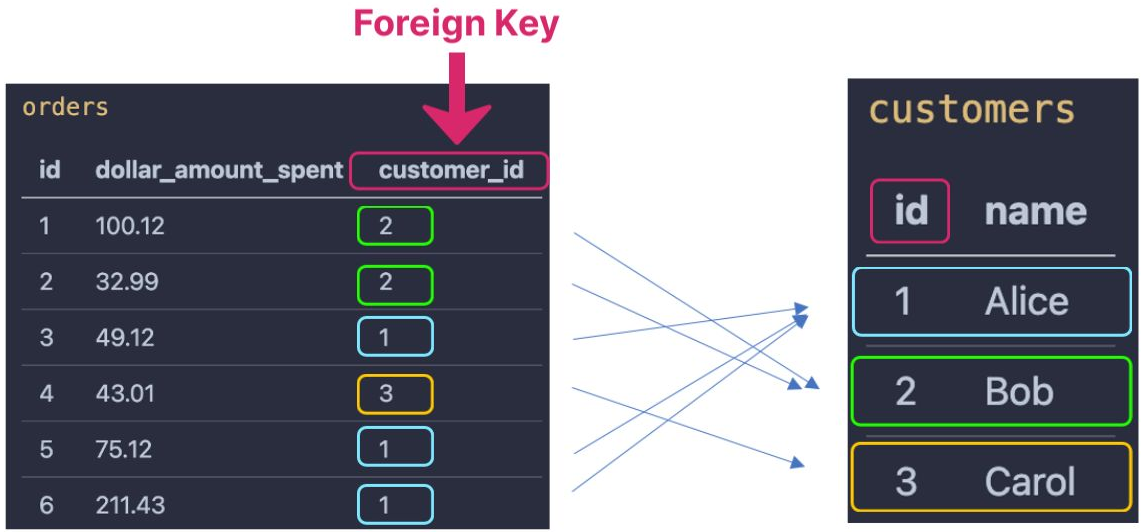
Example: Country has 1 Capital City, and Capital City has 1 Country



One-to-Many

Requires a foreign key column on the "many" table

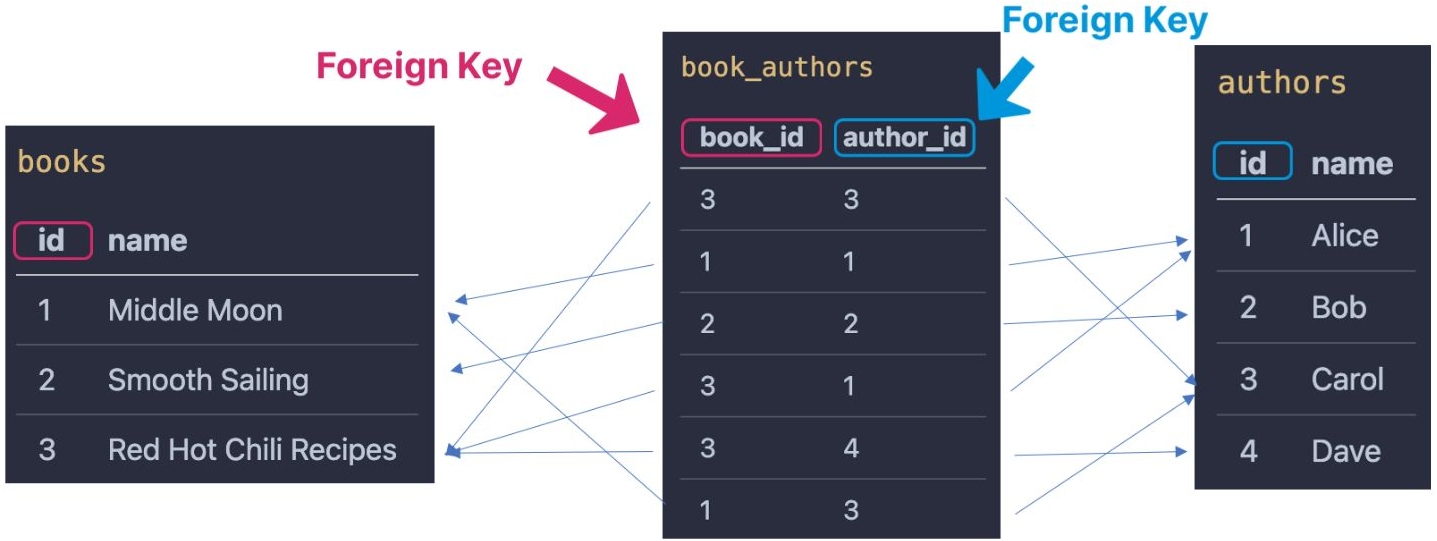
Example: Customer has multiple Orders, such that each Order belongs to 1 Customer



Many-to-Many

Requires an intermediate table of unique non-nullable foreign key pairs to reference each table

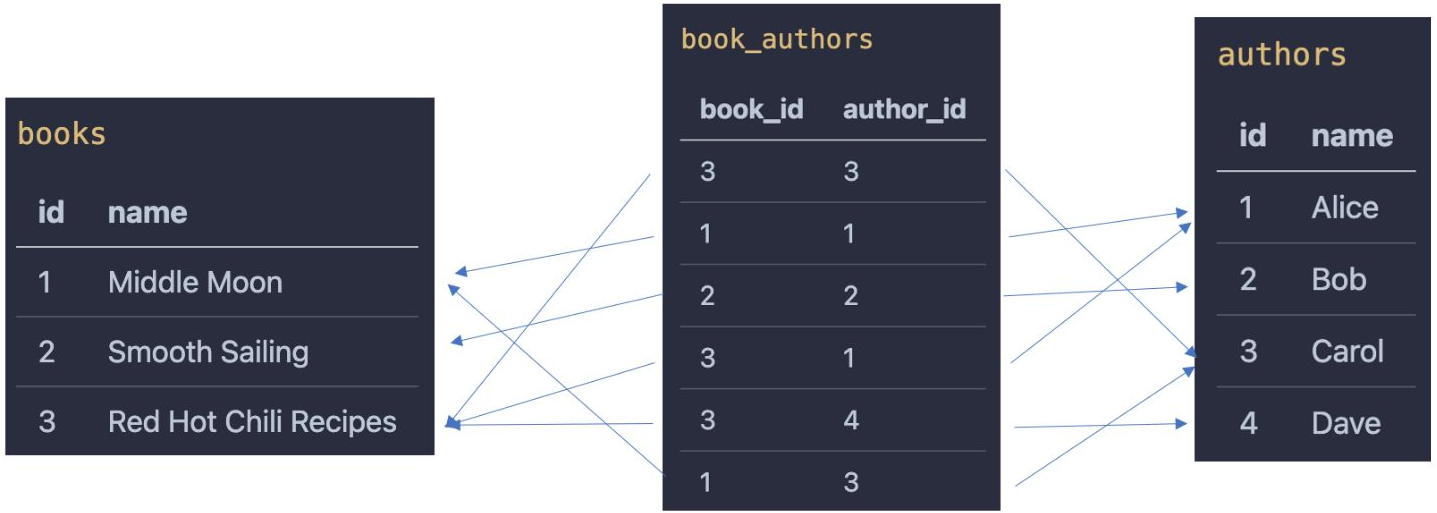
Example: Author may write multiple books, and Book may be written by several Authors



Many-to-Many

Question: Who wrote "Red Hot Chili Recipes"?

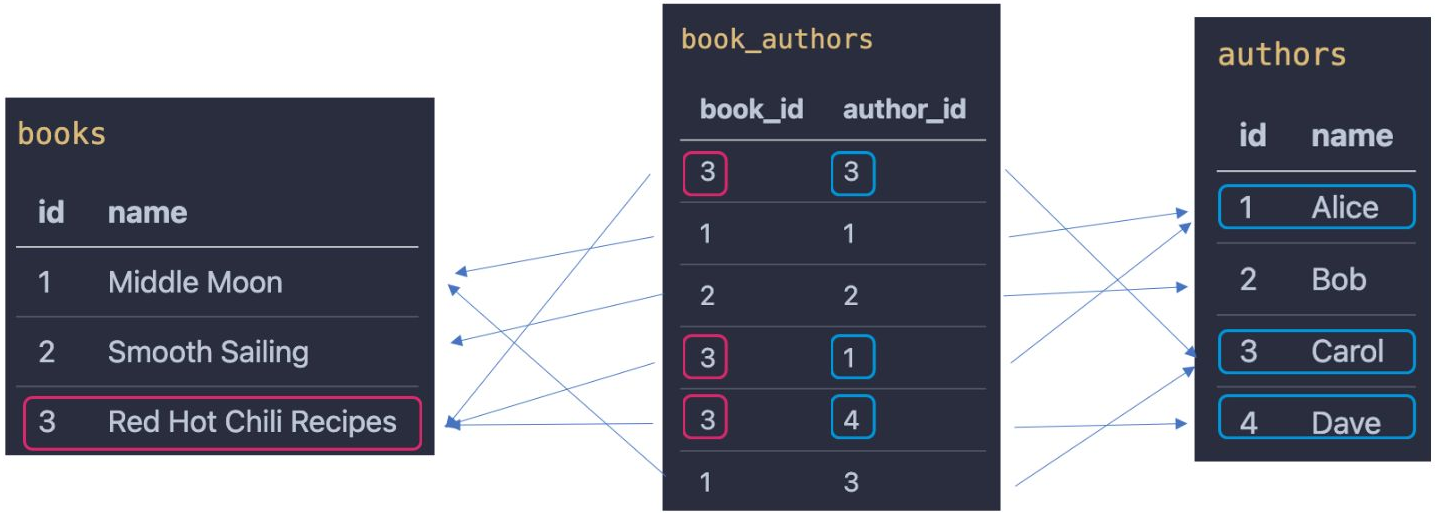
Pause the video until you find the answer



Many-to-Many

Question: Who wrote "Red Hot Chili Recipes"?

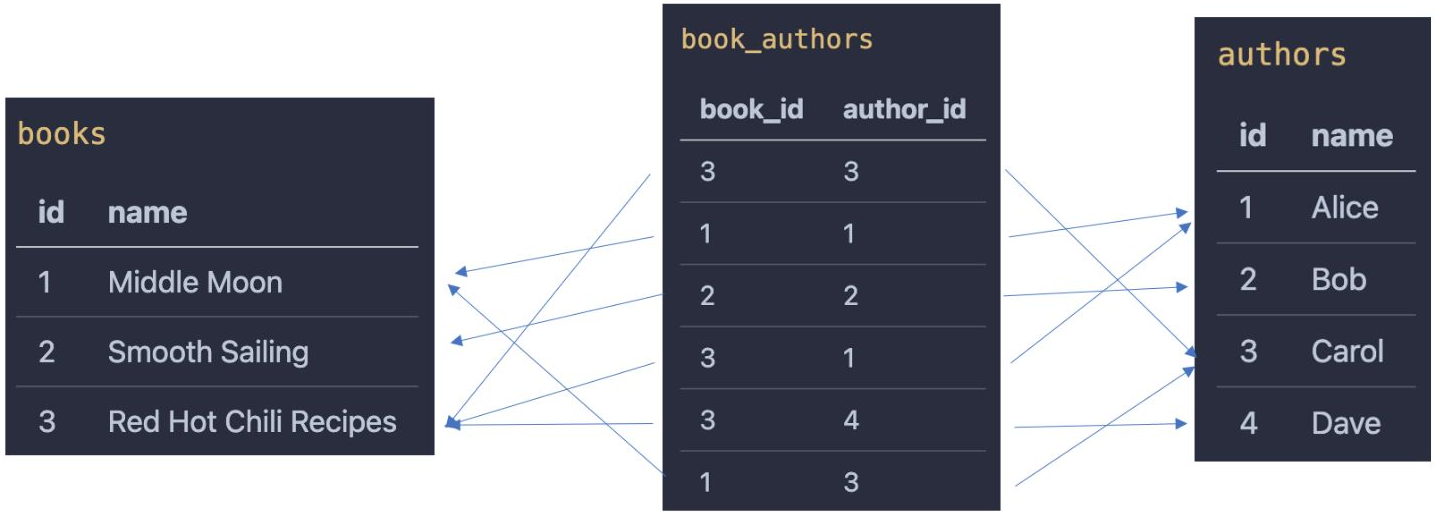
Answer: Carol, Alice, and Dave



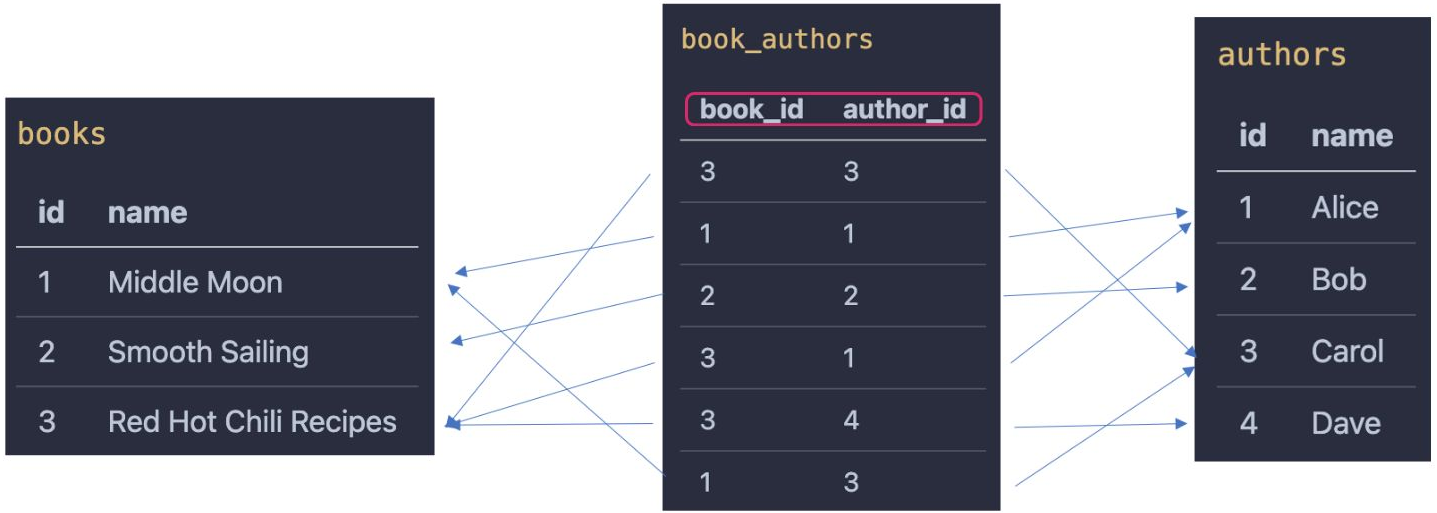
Many-to-Many

Question: What is the primary key of books_authors?

Pause the video until you find the answer



Many-to-Many

Question: What is the primary key of books_authors?

Answer: A composite primary key of (book_id, author_id) pairs