

### 3.1: Intro to relational Databases

Actors with the name "ED" according to Excel: 3

The result of SQL is matching with the results of Excel. The SQL formula is more logic since you directly put into code what you want. It is not necessary to highlight all the rows of column "first name", thereby the chance to make mistakes is lowered. Furthermore, I basically get a direct pathway to the desired information about the dataset WITHOUT working with the dataset itself.

Step 3:

payment_id [PK] integer	customer_id smallint	staff_id smallint	rental_id integer	amount numeric (5,2)	payment_date timestamp without time zone
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"actor"

"store"

"address"

"category"

"city"

"country"

"customer"

"film\_actor"

"film\_category"

"inventory"

"language"

"rental"

"staff"

"payment"

"film"

- Another way to list all the table names in the database instead of the SQL statement is to click on Schemas folder on the left pane and click on Tables.
- All movies were rented between 3 and 7 days. However, the most movies were rented for 6 days.

#### Step 4

#### OLAP

- The marketing team might also be interested in sales trends to come up with new marketing strategies / incentives.
- The finance team might want to look at these trends for reporting and to provide a budget allocation.

#### OLTP

- The sales team will record sales transactions to the database.
- The management team will record employee KPIs for assessments.

#### Step 5

The invoice contains structured data because all the information can be organized in tables of rows and columns.

#### Seller

Account No.	Name	Account Name	Address	City	State
4929 3310 0057 5422	Oaklanders Sound Studio	Miko Santo	4826 Norma Ave	Anderson	Tx

#### Consignee

Title	First Name	Last Name	Address	City	State
Mr	Timothy	Walker	40 Shella La	Sparks	NV

#### Transaction

Invoice No.	Item	Qty	Description	Currency	Subtotal	Total
2019001	1	1	New Video Collecting Licensing	USD	\$730	\$730