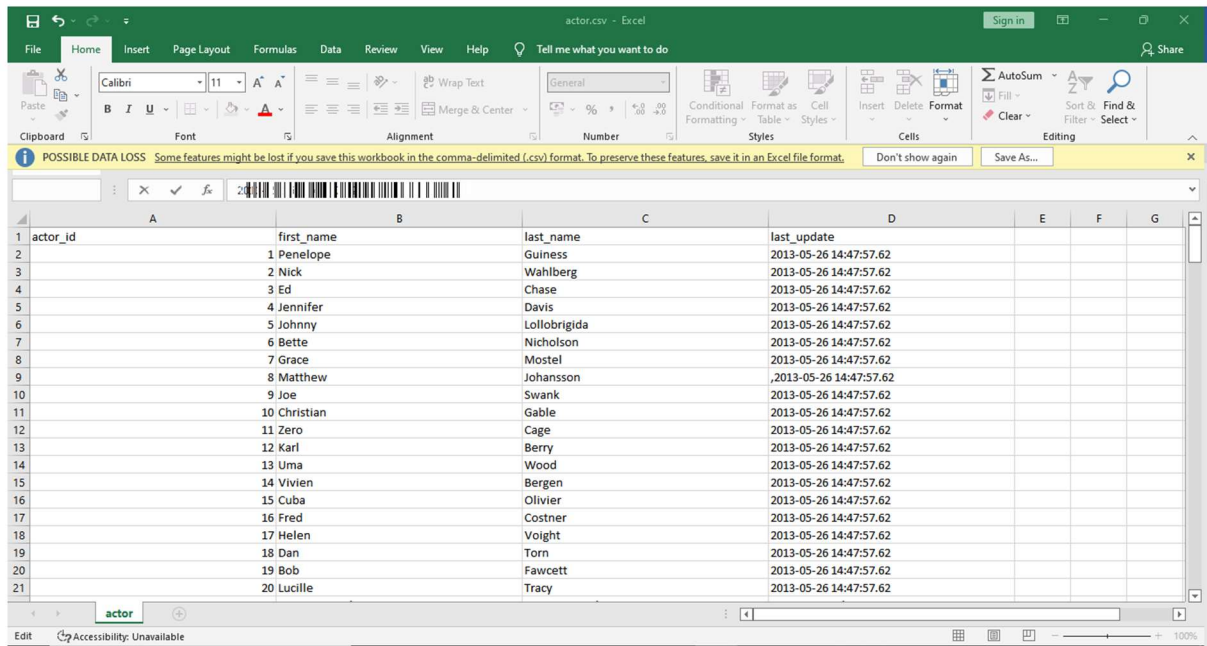


Intro. to Relational Databases

Step 2

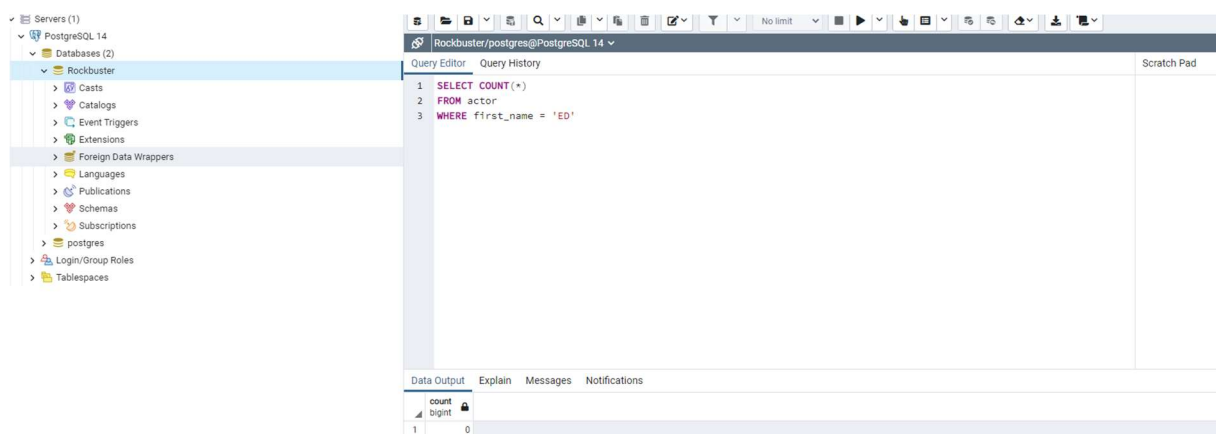
3 Actors have the name “ED”



The screenshot shows an Excel spreadsheet titled 'actor.csv - Excel'. The data is organized into columns: actor_id, first_name, last_name, and last_update. The first_name column contains the names of 20 actors, including Penelope, Nick, Ed, Jennifer, Johnny, Bette, Grace, Matthew, Joe, Christian, Zero, Karl, Uma, Vivien, Cuba, Fred, Helen, Dan, Bob, and Lucille. The last_name column contains the last names of these actors, and the last_update column contains the date and time of the last update for each actor. A warning banner at the top indicates a possible data loss if the file is saved in CSV format.

actor_id	first_name	last_name	last_update
1	Penelope	Guinness	2013-05-26 14:47:57.62
2	Nick	Wahlberg	2013-05-26 14:47:57.62
3	Ed	Chase	2013-05-26 14:47:57.62
4	Jennifer	Davis	2013-05-26 14:47:57.62
5	Johnny	Lolobrigida	2013-05-26 14:47:57.62
6	Bette	Nicholson	2013-05-26 14:47:57.62
7	Grace	Mostel	2013-05-26 14:47:57.62
8	Matthew	Johansson	2013-05-26 14:47:57.62
9	Joe	Swank	2013-05-26 14:47:57.62
10	Christian	Gable	2013-05-26 14:47:57.62
11	Zero	Cage	2013-05-26 14:47:57.62
12	Karl	Berry	2013-05-26 14:47:57.62
13	Uma	Wood	2013-05-26 14:47:57.62
14	Vivien	Bergen	2013-05-26 14:47:57.62
15	Cuba	Olivier	2013-05-26 14:47:57.62
16	Fred	Costner	2013-05-26 14:47:57.62
17	Helen	Voight	2013-05-26 14:47:57.62
18	Dan	Torn	2013-05-26 14:47:57.62
19	Bob	Fawcett	2013-05-26 14:47:57.62
20	Lucille	Tracy	2013-05-26 14:47:57.62

There is a 0 count for “ED”



The screenshot shows a PostgreSQL query editor interface. The query editor displays the following SQL query:

```
1 SELECT COUNT(*)  
2 FROM actor  
3 WHERE first_name = 'ED'
```

The query output shows a single row with the count of actors whose first name is 'ED', which is 0.

count
0

The number count from excel was must easier because the data involve was low.

STEP 3

Servers (1)

- PostgreSQL 14
 - Databases (2)
 - Rockbuster
 - Castes
 - Catalogs
 - Event Triggers
 - Extensions
 - Foreign Data Wrappers
 - Languages
 - Publications
 - Schemas
 - Subscriptions
 - postgres
 - Login/Group Roles
 - Tablespaces

Rockbuster/postgres@PostgreSQL 14

Query Editor Query History

1 SELECT * FROM payment LIMIT 10;

Scratch Pad

Data Output Explain Messages Notifications

	payment_id [PK] integer	customer_id smallint	staff_id smallint	rental_id integer	amount numeric (5,2)	payment_date timestamp without time zone
1	17503	341	2	1520	7.99	2007-02-15 22:25:46.996577
2	17504	341	1	1778	1.99	2007-02-16 17:23:14.996577
3	17505	341	1	1849	7.99	2007-02-16 22:41:45.996577
4	17506	341	2	2829	2.99	2007-02-19 19:39:56.996577
5	17507	341	2	3130	7.99	2007-02-20 17:31:48.996577
6	17508	341	1	3382	5.99	2007-02-21 12:33:49.996577
7	17509	342	2	2190	5.99	2007-02-17 23:58:17.996577
8	17510	342	1	2914	5.99	2007-02-20 02:11:44.996577
9	17511	342	1	3081	2.99	2007-02-20 13:57:39.996577
10	17512	343	2	1547	4.99	2007-02-16 00:10:50.996577

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Rockbuster/postgres@PostgreSQL 14

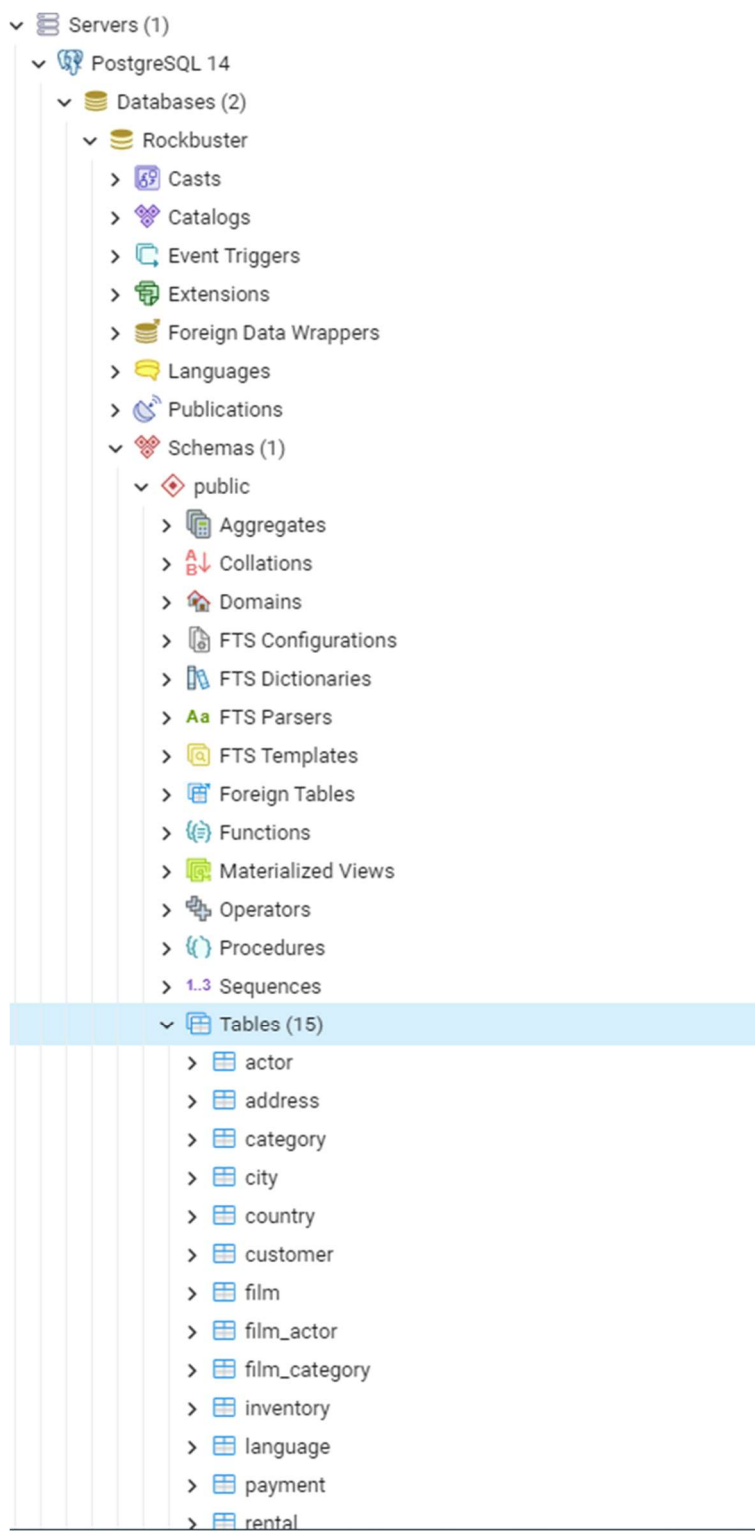
Query Editor Query History

1 SELECT * FROM information_schema.tables
2 WHERE table_schema = 'public'
3 AND table_type = 'BASE TABLE'

Scratch Pad

Data Output Explain Messages Notifications

	table_catalog name	table_schema name	table_name name	table_type character varying	self_referencing_column_name name	reference_generation character varying	user_defined_type_catalog name	user_defined_type_schema name	user_defined_type_name name
1	Rockbuster	public	actor	BASE TABLE	[null]	[null]	[null]	[null]	[null]
2	Rockbuster	public	store	BASE TABLE	[null]	[null]	[null]	[null]	[null]
3	Rockbuster	public	address	BASE TABLE	[null]	[null]	[null]	[null]	[null]
4	Rockbuster	public	category	BASE TABLE	[null]	[null]	[null]	[null]	[null]
5	Rockbuster	public	city	BASE TABLE	[null]	[null]	[null]	[null]	[null]
6	Rockbuster	public	country	BASE TABLE	[null]	[null]	[null]	[null]	[null]
7	Rockbuster	public	customer	BASE TABLE	[null]	[null]	[null]	[null]	[null]
8	Rockbuster	public	film_actor	BASE TABLE	[null]	[null]	[null]	[null]	[null]
9	Rockbuster	public	film_category	BASE TABLE	[null]	[null]	[null]	[null]	[null]
10	Rockbuster	public	inventory	BASE TABLE	[null]	[null]	[null]	[null]	[null]
11	Rockbuster	public	language	BASE TABLE	[null]	[null]	[null]	[null]	[null]
12	Rockbuster	public	rental	BASE TABLE	[null]	[null]	[null]	[null]	[null]
13	Rockbuster	public	staff	BASE TABLE	[null]	[null]	[null]	[null]	[null]
14	Rockbuster	public	payment	BASE TABLE	[null]	[null]	[null]	[null]	[null]



Rockbuster/postgres@PostgreSQL 14

Query EditorQuery History

```
1 SELECT rental_duration AS "rented for (in days)", COUNT (*) AS "number of films"
2 FROM film
3 GROUP BY 1
4 ORDER BY 2
```

Data OutputExplainMessagesNotifications

	rented for (in days) smallint	number of films bigint
1	7	191
2	5	191
3	4	203
4	3	203
5	6	212

STEP 4

OLAP

- ✓ Sales on figures on a monthly or yearly basis.
- ✓ Show which days are most popular for movie rentals

OLTP

- ✓ Tracking rental status of movies.
- ✓ Storing new customer rental details.

STEP 5

Invoice is structured.

Invoice_num	Item_num	Qty.	Description	Price
2019001	001	01	New Video Collection Licensing	\$730

Last_name	First_name	Address	City	State
Walker	Timothy	40 Sheila	Sparks	NV

Vendor_name	Acct_name	Acct_num	Adress	City	State
Oaklanders	Miko Santo	4929331000575420	48260 Norma Avenue	AndersoTexasn	TX