

C.F. 3.3: SQL for Data Analysts

Answers 3.3

Step one:

Query

Query History

1
2
3

SELECT *
FROM category

Data Output

Messages

Notifications

	category_id [PK] integer	name character varying	last_update timestamp without time zone
1	1	Action	2006-02-15 09:46:27
2	2	Animation	2006-02-15 09:46:27
3	3	Children	2006-02-15 09:46:27
4	4	Classics	2006-02-15 09:46:27
5	5	Comedy	2006-02-15 09:46:27
6	6	Documentary	2006-02-15 09:46:27
7	7	Drama	2006-02-15 09:46:27
8	8	Family	2006-02-15 09:46:27
9	9	Foreign	2006-02-15 09:46:27
10	10	Games	2006-02-15 09:46:27
11	11	Horror	2006-02-15 09:46:27
12	12	Music	2006-02-15 09:46:27
13	13	New	2006-02-15 09:46:27
14	14	Sci-Fi	2006-02-15 09:46:27
15	15	Sports	2006-02-15 09:46:27
16	16	Travel	2006-02-15 09:46:27

Step two:

Manually added
each category.
(There must be a
way to add
multiple
categories, but I
didn't find it.)

Show queries generated internally by pgAdmin? <input checked="" type="checkbox"/>	25/05/2023 13:24:49	30 msec	I
<input type="button" value="Remove"/> <input type="button" value="Remove All"/>	Date	Rows affected	Q
Today - 25/05/2023			S
▶ INSERT INTO category(name) VALUES('War') 13:26:47	<input type="button" value="Copy"/> <input type="button" value="Copy to Query Editor"/>		
▶ INSERT INTO category(name) VALUES('Romance... 13:26:43	<pre>INSERT INTO category(name) VALUES('Thriller')</pre>		
▶ INSERT INTO category(name) VALUES('Mystery... 13:26:37	Messages		
▶ INSERT INTO category(name) VALUES('Crime') 13:26:30	Query returned successfully in 30 msec.		
▶ INSERT INTO category(name) VALUES('Thrille... 13:24:49			
▶ SELECT * FROM category 13:18:06			

The **NOT NULL** constraint creates a need for a value to be entered: There can be no blank or empty values. **DEFAULT** forces the database to use the specified 'default' value, which is defined in the first line with 'integer' and 'nextval' making it appear sequential in the list. Later for the timestamp, the **DEFAULT** is 'now' unless a date is entered. The last constraint is **PRIMARY KEY** which makes all the values primary keys for the table. This allows each value to be unique for the row.

Step three: Find African Egg

Query	Query History		Data Output	Messages	Notifications
1	SELECT * FROM film		<div><div><div>≡+</div><div><div>📄</div><div>▼</div><div>📋</div><div>▼</div><div>🗑️</div><div>🗄️</div><div>⬇️</div><div>📈</div></div></div></div>		
			<div><div></div><div>film_id</div><div>[PK] integer</div><div>✎</div></div>	<div><div></div><div>title</div><div>character varying</div><div>✎</div></div>	<div><div></div><div>desc</div><div>text</div><div></div></div>
		8	4	Attair Prejudice	A Fa
		9	5	African Egg	A Fa
		10	6	Agent Truman	A Int

Find category

Query

Query History

1

SELECT * FROM film_category

	film_id [PK] smallint	category_id [PK] smallint	last_update timestamp without time zone
4	4	11	2006-02-15 10:07:09
5	5	8	2006-02-15 10:07:09
6	6	9	2006-02-15 10:07:09

Change category

Query	Query History
1	<code>UPDATE film_category</code>
2	<code>SET category_id=17</code>
3	<code>WHERE film_id=5</code>

Check your work

1

SELECT * FROM film_category

Data OutputMessagesNotifications

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▼

	film_id [PK] smallint	category_id [PK] smallint	last_update timestamp without time zone
991	992	6	2006-02-15 10:07:09
992	993	3	2006-02-15 10:07:09
993	994	13	2006-02-15 10:07:09
994	995	11	2006-02-15 10:07:09
995	996	6	2006-02-15 10:07:09
996	997	12	2006-02-15 10:07:09
997	998	11	2006-02-15 10:07:09
998	999	3	2006-02-15 10:07:09
999	1000	5	2006-02-15 10:07:09
1000	5	17	2023-05-25 14:09:08.891821

Step four: Image with Mystery, **DELETE FROM** command, Table showing deleted category.

The screenshot shows the pgAdmin interface. On the left, the 'Query' tab displays the following SQL command:

```
1 DELETE FROM category
2 WHERE category_id = 19
```

On the right, the 'Query History' tab shows the same command. Below the query history, a table displays the results of the query. The table has four columns: 'id', 'category_id', 'name', and 'last_update'. The row for 'Romance' (category_id 20) is highlighted in blue, indicating it was the row affected by the delete operation.

id	category_id	name	last_update
17	17	Thriller	2023-05-25 13:24:49.462783
18	18	Crime	2023-05-25 13:26:30.092769
19	20	Romance	2023-05-25 13:26:43.468988
20	21	War	2023-05-25 13:26:47.034216

At the bottom of the interface, a status bar indicates 'Rows selected: 1'.

Step five: The major bonus for me is I don't enjoy Excel. Having said that, The visual GUI of pgAdmin allows me to see what it is I am selecting, changing, etc. The process will be quicker for me as I learn, so that is a benefit. Excel can be cumbersome, but it has its utility.

SQL must have a way to add multiple categories; I had to add them one by one, instead of all in one command. I could not figure this out on my own. When adding multiple items in Excel, if it is a formula, you can simply drag the box and it will update the calculations automatically.