Answers 3.3

Step 1

Query | Query History

```
1  SELECT * from category
```

Data output | Messages | Notifications

	category_id [PK] integer	name character varying (25)	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 2

```
INSERT INTO category(name)
VALUES('Thriller'),('Crime'),('Mystery'),('Romance'),('War')
```

Query | Query History

```
1  SELECT * FROM category
```

Data output | Messages | Notifications

	category_id [PK] integer	name character varying (25)	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
17	17	Thriller	2022-08-12 14:43:19.33701
18	18	Crime	2022-08-12 14:43:19.33701
19	19	Mystery	2022-08-12 14:43:19.33701
20	20	Romance	2022-08-12 14:43:19.33701
21	21	War	2022-08-12 14:43:19.33701

Write a short paragraph explaining the various constraints that have been applied to the columns. What do these constraints do exactly? Why are they important?

The CREATE TABLE category statement creates important constraints to assure no values that don't meet the criteria are added into the dataset.

category_id: Value is an integer and cannot be null, and any additional values created will be the next integer up.

name: Must be text and cannot be null.

last_update: Must be a timestamp with time zone and cannot be null, and by default the time is whatever it is right now.

Primary Key is established as being category_id

Step 3

To find the film_id:

Query | Query History

```
1  SELECT * FROM film
2  WHERE title = 'African Egg'
```

Data output | Messages | Notifications

	film_id [PK] integer	title character varying (255)
1	5	African Egg

To find the category_id:

Query | Query History

```
1  SELECT category_id FROM film_category WHERE film_id = 5
```

Data output | Messages | Notifications

	category_id smallint
1	8

To find the category_id for Thriller:

Query | Query History

```
1  SELECT category_id FROM category WHERE name = 'Thriller'
```

Data output | Messages | Notifications

	category_id [PK] integer
1	17

To update the catgory_id:

Query | Query History

```
1  UPDATE film_category SET category_id = 17 WHERE film_id = 5;
```

Data output | Messages | Notifications

	category_id [PK] integer
1	17

Step 4

Deleted the Mystery category:

Query | Query History

```
1  DELETE FROM category WHERE name = 'Mystery';
```

Data output | Messages | Notifications

```
DELETE 1

Query returned successfully in 38 msec.
```

Step 5

Based on what you've learned so far, think about what it would be like to complete steps 1 to 4 with Excel instead of SQL. Are there any pros and cons to using SQL? Write a paragraph explaining your answer.

Based on the task above, I believe this task is easier to execute on SQL. The queries allow you to immediately find and alter the area of desired change, whereas in excel you would need to search for it, and then alter it. Furthermore, excel does not contain the constraints, and in some tasks, you could make many errors without the protection of constraints, which would be more difficult to undo.

Bonus Task

```
CREATE TABLE EMPLOYEES
 (
employee_id SERIAL NOT NULL,
name VARCHAR(50),
contact_number VARCHAR(30),
designation_id SMALLINT,
last_update TIMESTAMP NOT NULL DEFAULT now(),
CONSTRAIN employee_pkey PRIMARY KEY (employee_id));
```