Answers 3.3

Step 1:

Your first task is to find out what film genres already exist in the category table:

	category_id [PK] integer	name character varying (25)
1	1	Action
2	2	Animation
3	3	Children
4	4	Classics
5	5	Comedy
6	6	Documentary
7	7	Drama
8	8	Family
9	9	Foreign
10	10	Games
11	11	Horror
12	12	Music
13	13	New
14	14	Sci-Fi
15	15	Sports
16	16	Travel

Step 2:

You're ready to add some new genres! Write an `INSERT` statement to add the following genres to the category table: Thriller, Crime, Mystery, Romance, and War:

```
INSERT INTO category(category_id, name)
VALUES (17, 'Thriller')
 (18, 'Crime'),
 (19, 'Mystery'),
 (20, 'Romance'),
 (21, 'War')
```

- 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?
    - none of the columns can have a null value which avoids empty cells and is supported by some of the default constraints. category_id will only allow integer numbers and will select the next value in the sequence by default, which means that it would not be necessary to check which numbers were already used before adding a new record. name will only allow text values. last_update will default to date and time at the current moment. catergory_id is also set to be the primary key of this table.

```
  CREATE TABLE category
(
  category_id integer NOT NULL DEFAULT nextval('category_category_id_seq'::regclass),
  name text COLLATE pg_catalog."default" NOT NULL,
  last_update timestamp with time zone NOT NULL DEFAULT now(),
  CONSTRAINT category_pkey PRIMARY KEY (category_id)
);
```

Step 3:

The genre for the movie *African Egg* needs to be updated to thriller. Work through the steps below to make this change:

- Write the `SELECT` statement to find the film_id for the movie *African Egg*.
- Once you have the film_ID and category_ID, write an `UPDATE` command to change the category in the film_category table (not the category table). Copy-paste this command into your answers document.

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

Step 4:

Since there aren't many movies in the mystery category, you and your manager decide to remove it from the category table. Write a `DELETE` command to do so and copy-paste it into your answers document.

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

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.

- Excel has advantages when working with a smaller data set, that is less interlinked and spread across multiple tabs. Once you have the right SQL command it is much faster and easier than Excel to find information and manipulate it. The table constraints also make it easier to maintain the data structure.

Bonus

```
CREATE TABLE employees_3
(
employee_id VARCHAR(30) NOT NULL,
name VARCHAR(50),
contact_number VARCHAR(30),
designation_id INT,
last_update TIMESTAMP NOT NULL DEFAULT now(),
CONSTRAINT employee_pkey PRIMARY KEY (employee_id)
);
```