3.5   Filtering Data

All outputs are to be found in attached excel file.

1. List of films (columns "film_ID," "title," and "description")

```sql
SELECT
    film_id AS "film_ID",
    title,
    description
FROM film;
```

a. Film title contains the word Uptown in any position

```sql
SELECT
    film_id AS "film_ID",
    title,
    description
FROM film
WHERE title LIKE '%Uptown%';
```

b. Film length is more than 120 minutes and rental rate is more than 2.99

```sql
SELECT
    film_id AS "film_ID",
    title,
    description
FROM film
WHERE length > 120 AND rental_rate > 2.99;
```

c. Rental duration is between 3 and 7 days (where 3 and 7 aren't inclusive)

```sql
SELECT
    film_id AS "film_ID",
    title,
    description
FROM film
WHERE rental_duration BETWEEN 4 AND 6;
```

d. Film replacement cost is less than 14.99

```sql
SELECT
    film_id AS "film_ID",
    title,
    description
FROM film
WHERE replacement_cost < 14.99;
```

e. Film rating is either PG or G

```
SELECT
    film_id AS "film_ID",
    title,
    description
FROM film
WHERE rating IN ('PG', 'G');
```

2. The inventory team has asked for the following information about this list (from 1e):

a. Count of the movies

```
SELECT
    COUNT(film_id) AS "Count of movies"
FROM film
WHERE rating IN ('PG', 'G');
```

b. Average rental rate

```
SELECT
    AVG(rental_rate) AS "Average rental rate"
FROM film
WHERE rating IN ('PG', 'G');
```

c. Maximum rental duration and minimum rental duration

```
SELECT
    MIN(rental_duration) AS "Minimal rental duration",
    MAX(rental_duration) AS "Maximal rental duration"
FROM film
WHERE rating IN ('PG', 'G');
```

3. Summary of 2 with labels

```
SELECT
    COUNT(film_id) AS "COUNT of movies",
    AVG(rental_rate) AS "AVERAGE rental rate",
    MIN(rental_duration) AS "MIN rental duration",
    MAX(rental_duration) AS "MAX rental duration"
FROM film
WHERE rating IN ('PG', 'G');
```

4. 3 – grouped by rating

```
SELECT
    rating,
    COUNT(film_id) AS "COUNT of movies",
    AVG(rental_rate) AS "AVERAGE rental rate",
    MIN(rental_duration) AS "MIN rental duration",
    MAX(rental_duration) AS "MAX rental duration"
FROM film
WHERE rating IN ('PG', 'G')
GROUP BY rating;
```