

# Queries for analysis of Rockbuster Stealth data

## Descriptive statistics for film table

```
SELECT MIN(rental_duration) AS min_duration,  
MAX(rental_duration) AS max_duration,  
AVG(rental_duration) AS avg_duration,  
MIN(rental_rate) AS min_rate,  
MAX(rental_rate) AS max_rate,  
AVG(rental_rate) AS avg_rate,  
MIN(length) AS min_length,  
MAX(length) AS max_length,  
AVG(length) AS avg_length,  
MIN(replacement_cost) AS min_cost,  
MAX(replacement_cost) AS max_cost,  
AVG(replacement_cost) AS avg_cost,  
COUNT (*) AS count_rows,  
mode() WITHIN GROUP (ORDER BY rating) AS mode_rating,  
mode() WITHIN GROUP (ORDER BY language_id) AS mode_language_id,  
mode() WITHIN GROUP (ORDER BY release_year) AS mode_release_year  
FROM film
```

	min_duration smallint	max_duration smallint	avg_duration numeric	min_rate numeric	max_rate numeric	avg_rate numeric	min_length smallint	max_length smallint	avg_length numeric	count_rows bigint
1	3	7	4.985	0.99	4.99	2.98	46	185	115.272	1000

	mode_rating mpaa_rating	mode_language_id smallint	mode_release_year integer
1	PG-13	1	2006

## Top 10 countries with the highest number of customers

```
SELECT D.country,
COUNT (customer_id) AS customer_id_count
FROM customer A
INNER JOIN address B on A.address_id = B. address_id
INNER JOIN city C on B.city_id = C.city_id
INNER JOIN country D on C. country_id = D. country_id
GROUP BY Country
ORDER BY customer_id_count DESC
LIMIT 10
```

	country character varying (50)	customer_id_count bigint
1	India	60
2	China	53
3	United States	36
4	Japan	31
5	Mexico	30
6	Brazil	28
7	Russian Federation	28
8	Philippines	20
9	Turkey	15
10	Indonesia	14

Total rows: 10 of 10    Query complete 00:00:01.841

## Top 10 cities among the top countries where there are the most customers for Rockbuster

```
SELECT D.country,
C.city,
COUNT (customer_id) AS customer_id_count
FROM customer A
INNER JOIN address B on A.address_id = B.address_id
INNER JOIN city C on B.city_id = C.city_id
INNER JOIN country D on C.country_id = D.country_id
WHERE D.country IN ('India', 'China', 'United States', 'Japan', 'Mexico', 'Brazil', 'Russian Federation',
                    'Phillipines', 'Turkey', 'Indonesia')
GROUP BY country, city
ORDER BY customer_id_count DESC
LIMIT 10
```

	country character varying (50)	city character varying (50)	customer_id_count bigint
1	United States	Aurora	2
2	Mexico	Acua	1
3	United States	Citrus Heights	1
4	Japan	Iwaki	1
5	India	Ambattur	1
6	China	Shanwei	1
7	Brazil	So Leopoldo	1
8	China	Tianjin	1
9	China	Hami	1
10	Indonesia	Cianjur	1

Total rows: 10 of 10    Query complete 00:00:02.201

### City of top five customers who have paid the highest total amounts to Rockbuster

```

FROM payment A
INNER JOIN customer B on A.customer_id = B.customer_id
INNER JOIN address C on B.address_id = C.address_id
INNER JOIN city D on C.city_id = D.city_id
INNER JOIN country E on D.country_id = E.country_id
WHERE D.city IN ('Aurora', 'Acua', 'Citrus Heights', 'Iwaki', 'Ambattur', 'Shanwei',
                'So Leopoldo', 'Teboksary', 'Tianjin', 'Cianjur')
GROUP BY B.first_name, B.last_name, A.customer_id, D.city, E.country
ORDER BY total_amount DESC
LIMIT 5

```

	customer_id smallint	first_name character varying (45)	last_name character varying (45)	city character varying (50)	country character varying (50)	total_amount numeric
1	225	Arlene	Harvey	Ambattur	India	111.76
2	424	Kyle	Spurlock	Shanwei	China	109.71
3	240	Marlene	Welch	Iwaki	Japan	106.77
4	486	Glen	Talbert	Acua	Mexico	100.77
5	537	Clinton	Buford	Aurora	United States	98.76

### Most revenue gained from movies according to rating

```

SELECT D.rating, SUM(A.amount)
FROM payment A
INNER JOIN rental B ON A.rental_id = B.rental_id
INNER JOIN inventory C ON B.inventory_id = C.inventory_id
INNER JOIN film D ON C.film_id = D.film_id
GROUP BY D.rating

```

	rating mpaa_rating	sum numeric
1	PG	12236.65
2	R	12073.03
3	NC-17	12634.92
4	PG-13	13855.56
5	G	10511.88

### Most total amount generated according to category of movies

```
SELECT E.name,  
SUM(A.amount) AS total_amount  
FROM payment A  
INNER JOIN rental B ON A.rental_id = B.rental_id  
INNER JOIN inventory C ON B.inventory_id = C.inventory_id  
INNER JOIN film_category D ON C.film_id = D.film_id  
INNER JOIN category E ON D.category_id = E.category_id  
GROUP BY E.name  
ORDER BY total_amount  
DESC
```

	name character varying (25) 🔒	total_amount numeric 🔒
1	Sports	4892.19
2	Sci-Fi	4336.01
3	Animation	4245.31
4	Drama	4118.46
5	Comedy	4002.48
6	New	3966.38
7	Action	3951.84
8	Foreign	3934.47
9	Games	3922.18
10	Family	3782.26
11	Documentary	3749.65
12	Horror	3401.27
13	Classics	3353.38
14	Children	3309.39
15	Travel	3227.36
16	Music	3071.52
17	Thriller	47.89