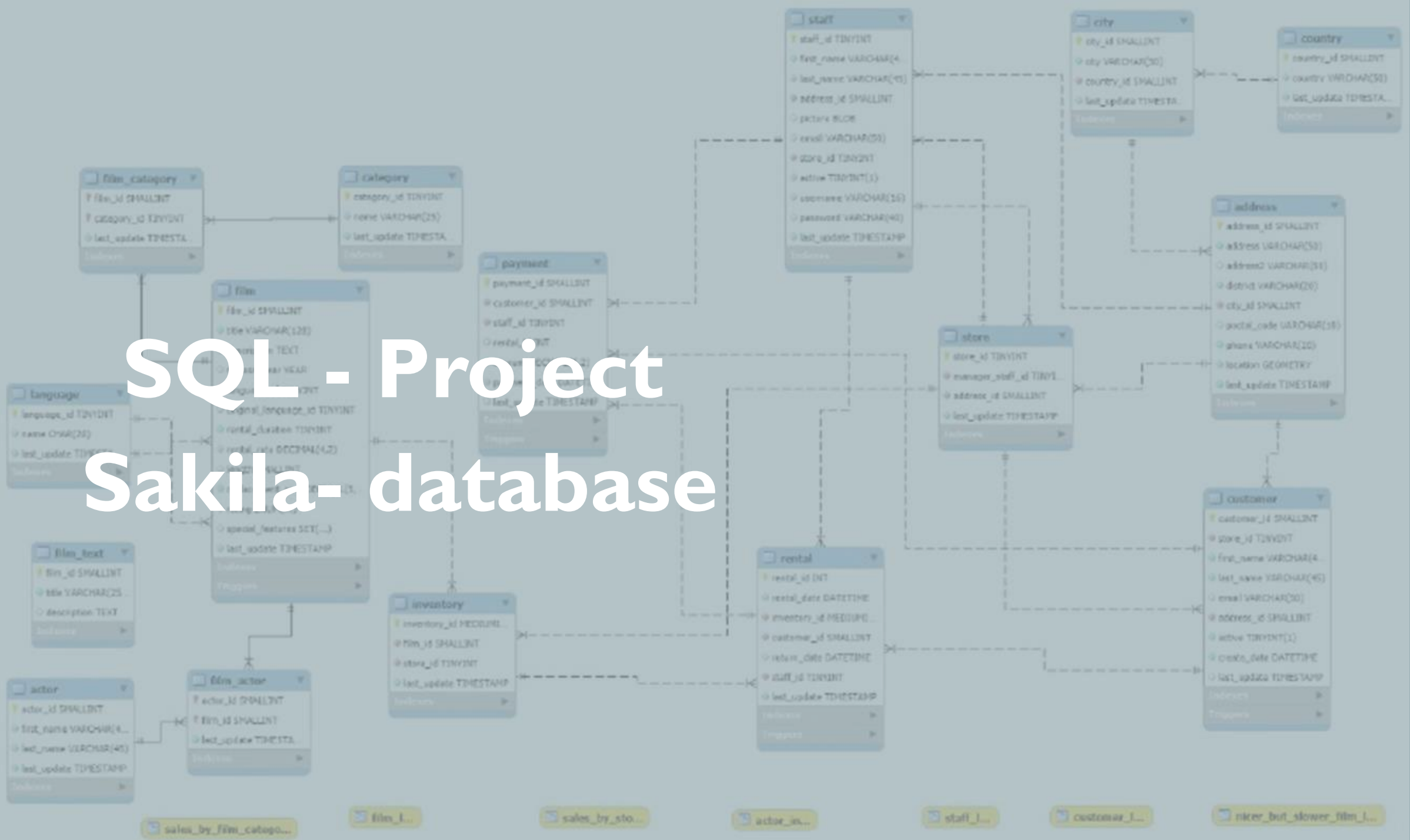


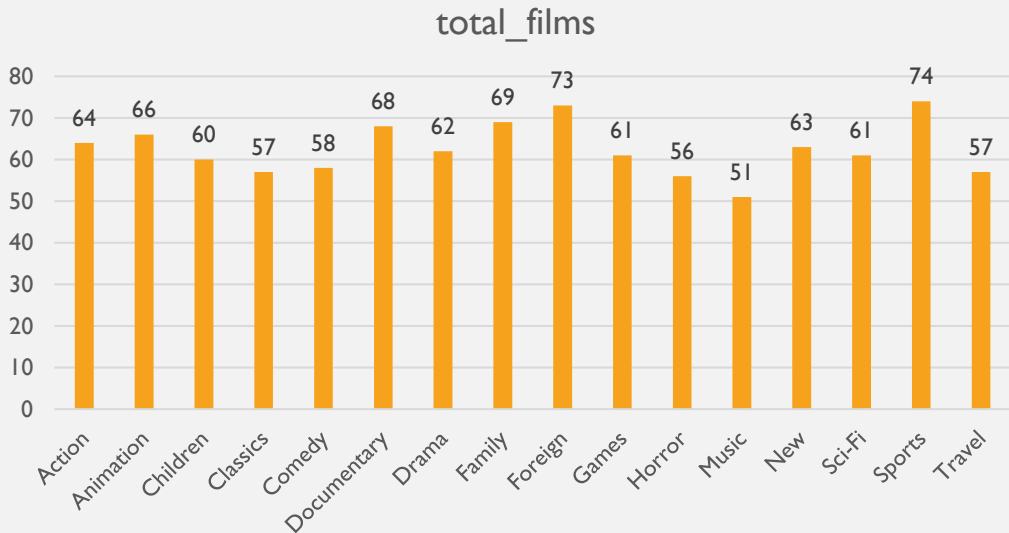
SQL - Project

Sakila- database



-- 1 THE TOTAL NUMBER OF FILMS IN EACH CATEGORY

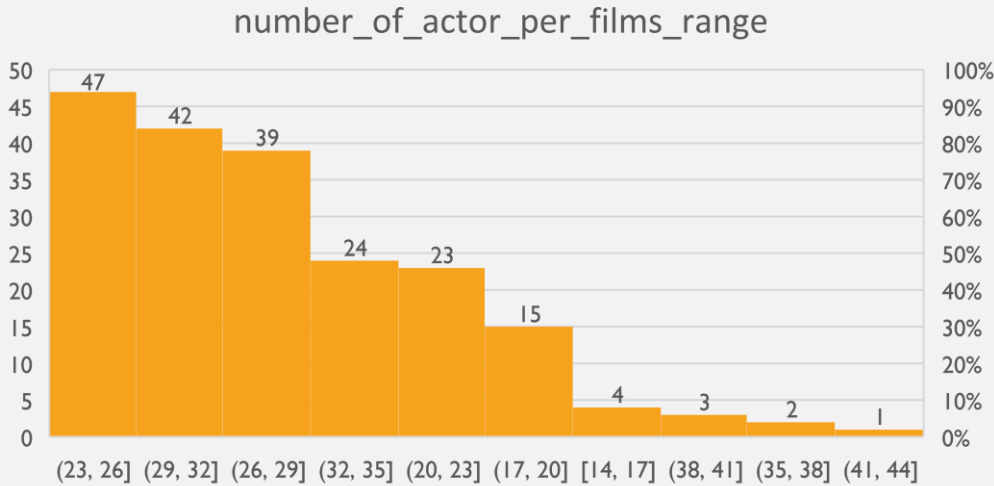
```
SELECT c.name AS category_name,
COUNT(f.film_id) AS total_films
FROM category c
LEFT JOIN film_category fc
ON c.category_id = fc.category_id
LEFT JOIN film f
ON fc.film_id = f.film_id
GROUP BY c.name;
```



-- 2 the names of actors who have acted in more than 10 films

```
SELECT a.first_name, a.last_name,
COUNT(fa.film_id) AS total_films
FROM actor a
JOIN film_actor fa
ON a.actor_id = fa.actor_id
GROUP BY a.actor_id
HAVING total_films > 10;
```

first_name	last_name	total_films
GINA	DEGENERES	42
WALTER	TORN	41
MARY	KEITEL	40
MATTHEW	CARREY	39
SANDRA	KILMER	37



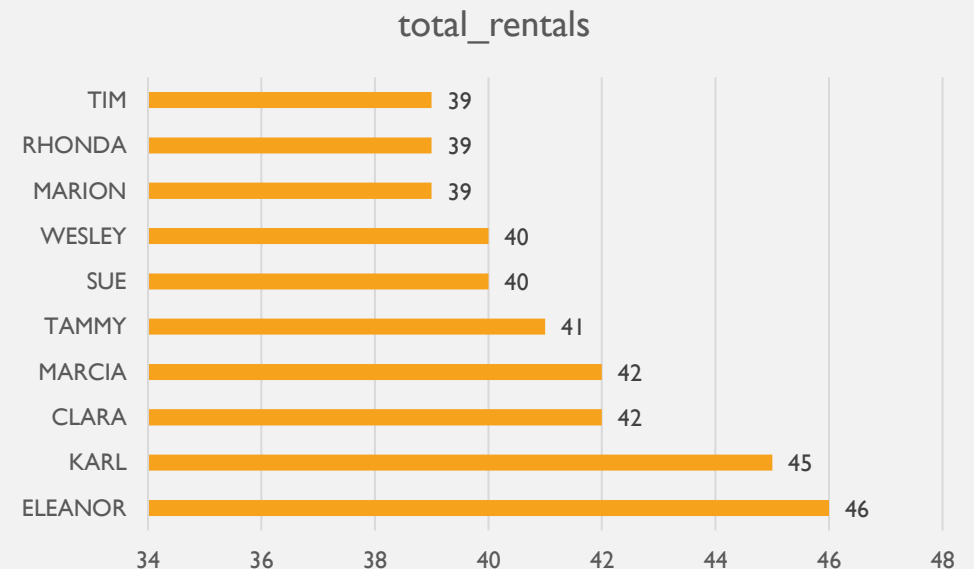
-- 3 THE AVERAGE RENTAL DURATION OF FILMS CATEGORIZED AS 'ACTION'

```
SELECT AVG(f.rental_duration) AS average_rental_duration
FROM film f
JOIN film_category fc
ON f.film_id = fc.film_id
JOIN category c
ON fc.category_id = c.category_id
WHERE c.name = 'Action';
```

average_rental_duration
4.9531

-- 4 the top 10 customers and their total rentals

```
SELECT c.first_name, c.last_name, COUNT(r.rental_id) AS
total_rentals
FROM customer c
JOIN rental r
ON c.customer_id = r.customer_id
GROUP BY c.customer_id
ORDER BY total_rentals DESC
LIMIT 10;
```



-- 5 THE TOTAL AMOUNT FROM RENTALS

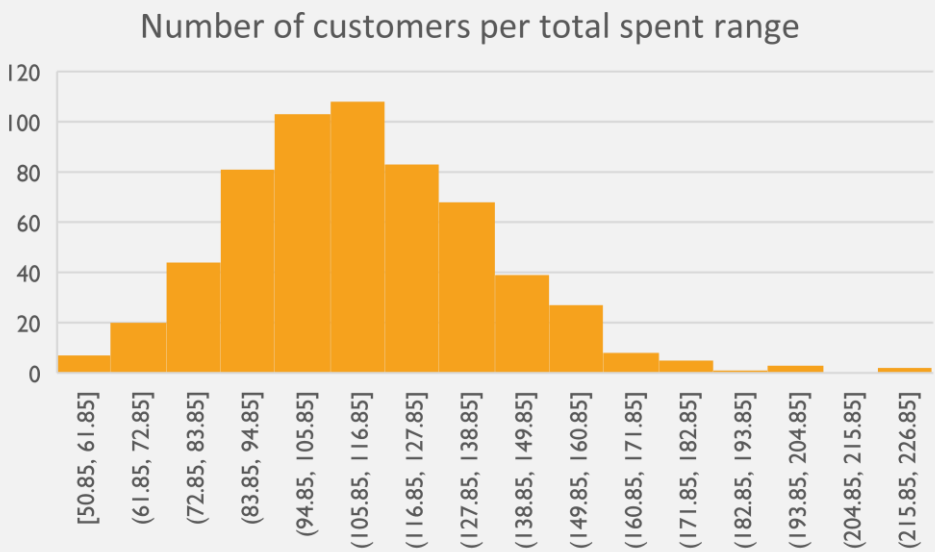
```
SELECT SUM(p.amount) AS total_amount_from_rentals
FROM payment P;
```

total_amount_from_rentals
67406.56

-- 6 the customers names based on their total spending on rentals

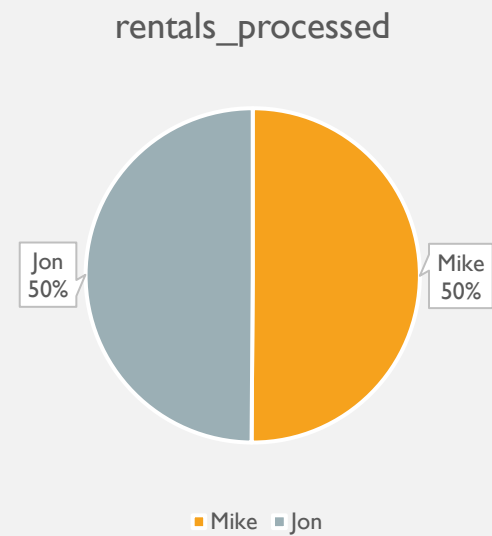
```
SELECT c.first_name, c.last_name,
SUM(p.amount) AS total_spent
FROM customer c
JOIN payment p
ON c.customer_id = p.customer_id
GROUP BY c.customer_id
```

first_name	last_name	total_spent
KARL	SEAL	221.55
ELEANOR	HUNT	216.54
CLARA	SHAW	195.58
RHONDA	KENNEDY	194.61
MARION	SNYDER	194.61



-- 7 THE STAFF MEMBERS AND THE NUMBER OF RENTALS THEY PROCESSED

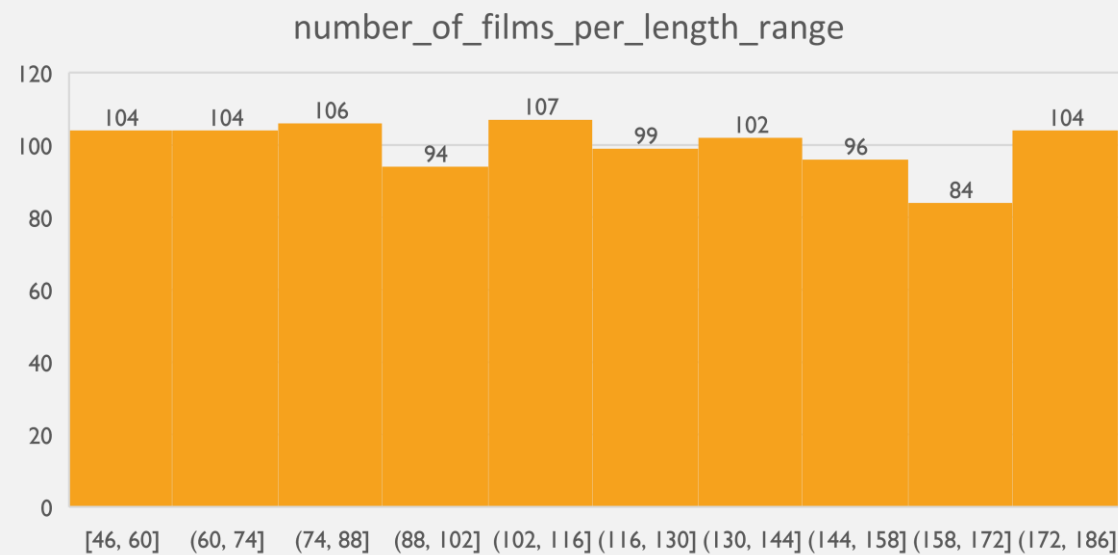
```
SELECT s.first_name, s.last_name,  
COUNT(r.rental_id) AS rentals_processed  
FROM staff s  
LEFT JOIN rental r  
ON s.staff_id = r.staff_id  
GROUP BY s.staff_id;
```



-- 8 all films and there length

```
SELECT title, length  
FROM film  
ORDER BY length DESC;
```

Average of length
115.272



-- 9 THE ACTORS WHO HAVE APPEARED IN FILMS BASED ON RENTAL RATE.

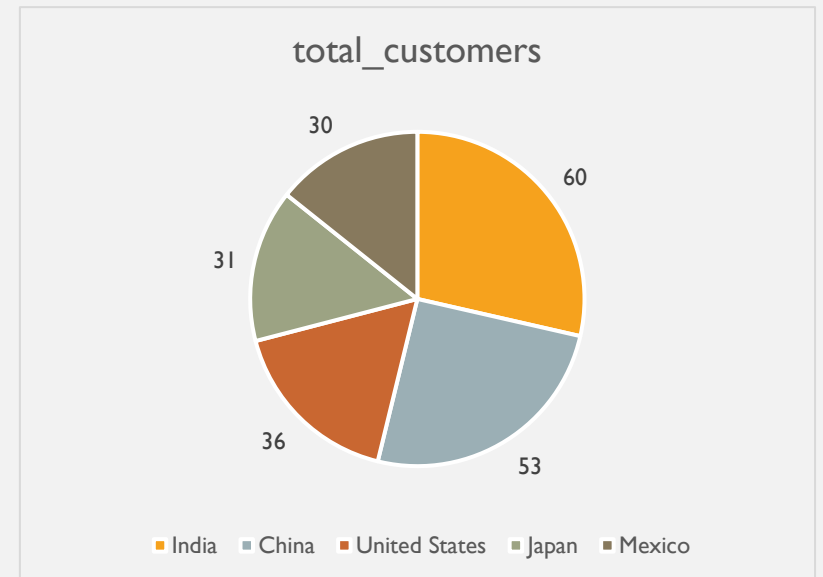
```
SELECT distinct (a.first_name),f.rental_rate
FROM actor a
JOIN film_actor fa
ON a.actor_id = fa.actor_id
JOIN film f
ON fa.film_id = f.film_id
ORDER BY f.rental_rate DESC;
```

Rental rate	Number of actors
0.99	128
2.99	128
4.99	128
Grand Total	384

-- 10 the total count of customers in each country

```
SELECT co.country, COUNT(c.customer_id) AS total_customers
FROM country co
JOIN city ci
ON co.country_id = ci.country_id
JOIN address a
ON ci.city_id = a.city_id
JOIN customer c
ON a.address_id = c.address_id
GROUP BY co.country
ORDER BY total_customers DESC ;
```

country	total_customers
India	60
China	53
United States	36
Japan	31
Mexico	30



-- 11 THE FILMS THAT HAVE BEEN RENTED MORE THAN FIVE TIME

```
SELECT f.title, COUNT(r.rental_id) AS rental_count
FROM film f
JOIN inventory i
ON f.film_id = i.film_id
JOIN rental r
ON i.inventory_id = r.inventory_id
GROUP BY f.film_id
HAVING rental_count > 5
ORDER BY rental_count DESC;
```

title	rental_count
BUCKET BROTHERHOOD	34
ROCKETEER MOTHER	33
FORWARD TEMPLE	32
GRIT CLOCKWORK	32
JUGGLER HARDLY	32

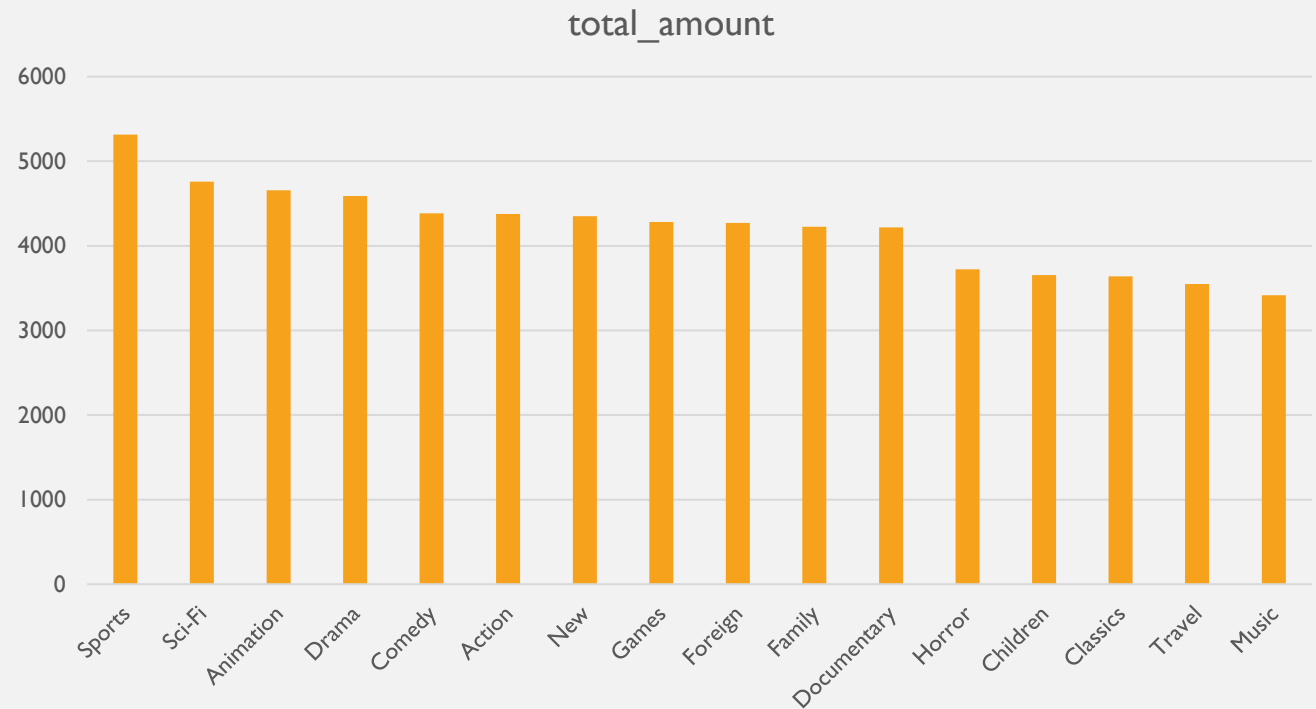
-- 12 the total number of rentals and total amount by each film

```
SELECT f.title, COUNT(r.rental_id) AS total_rentals,
SUM(p.amount) AS total_amount
FROM film f
LEFT JOIN inventory i
ON f.film_id = i.film_id
LEFT JOIN rental r
ON i.inventory_id = r.inventory_id
LEFT JOIN payment p
ON r.rental_id = p.rental_id
GROUP BY f.film_id
ORDER BY total_rentals DESC;
```

title	total_rentals	total_amount
TELEGRAPH VOYAGE	27	231.73
WIFE TURN	31	223.69
ZORRO ARK	31	214.69
GOODFELLAS SALUTE	31	209.69
SATURDAY LAMBS	28	204.72

-- I3 the total amount generated by each category of films

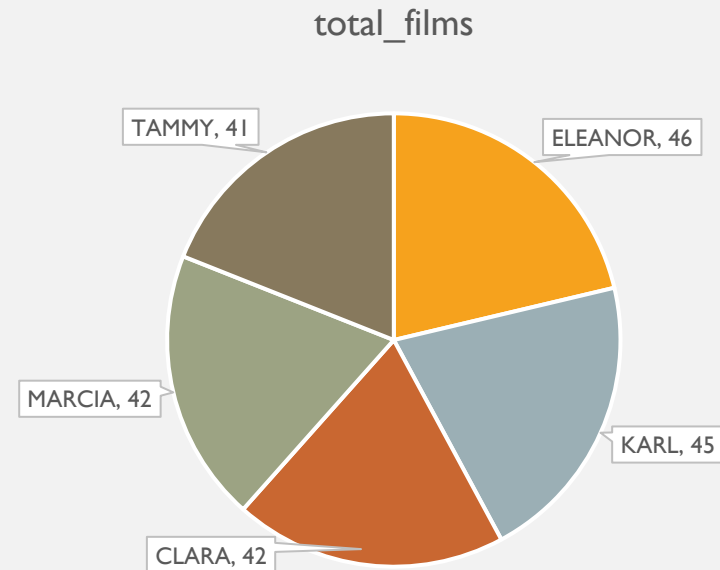
```
SELECT c.name AS category, SUM(p.amount) AS  
total_amount FROM category c  
JOIN film_category fc  
ON c.category_id = fc.category_id  
JOIN film f  
ON fc.film_id = f.film_id  
JOIN inventory i  
ON f.film_id = i.film_id  
JOIN rental r  
ON i.inventory_id = r.inventory_id  
JOIN payment p  
ON r.rental_id = p.rental_id  
GROUP BY c.category_id;
```



-- I4 the total number of films rented by each customer

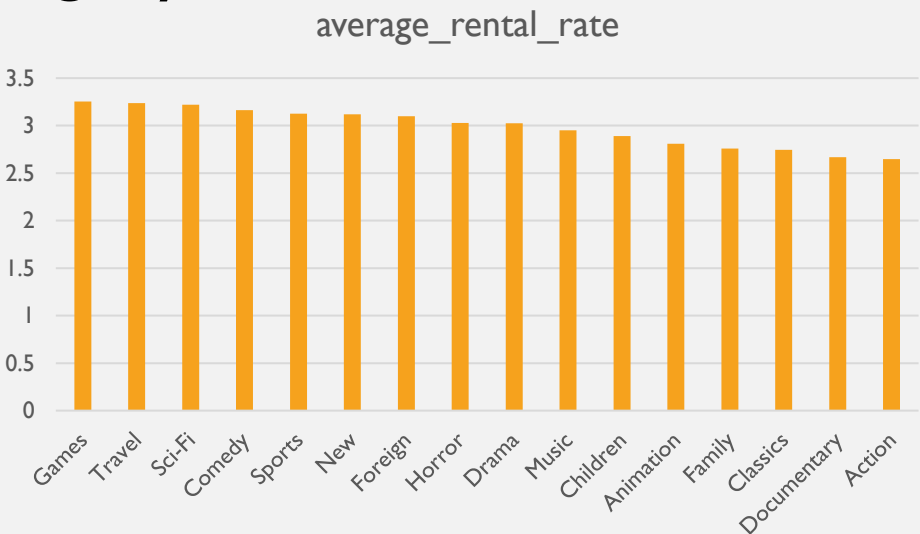
```
SELECT c.first_name, c.last_name, COUNT(f.film_id) AS total_films
FROM customer c
LEFT JOIN rental r
ON c.customer_id = r.customer_id
LEFT JOIN inventory i
ON r.inventory_id = i.inventory_id
LEFT JOIN film f
ON i.film_id = f.film_id
GROUP BY c.customer_id
ORDER BY total_films DESC;
```

first_name	last_name	total_films
ELEANOR	HUNT	46
KARL	SEAL	45
CLARA	SHAW	42
MARCIA	DEAN	42
TAMMY	SANDERS	41



-- 15 the average rental rate for films in each category

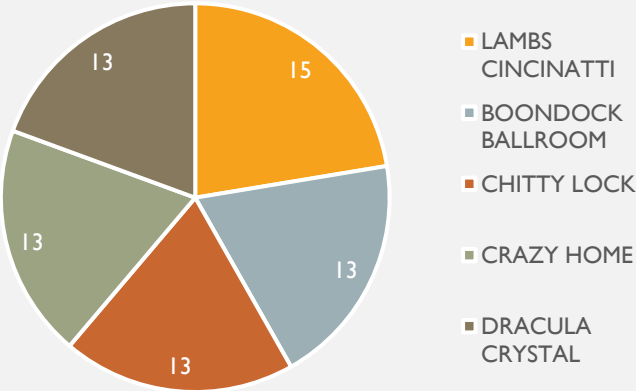
```
SELECT c.name AS category_name,AVG(f.rental_rate) AS
average_rental_rate
FROM category c
JOIN film_category fc
ON c.category_id = fc.category_id
JOIN film f ON fc.film_id = f.film_id
GROUP BY c.category_id
ORDER BY average_rental_rate DESC;
```



-- 16 the number of actors in each film

```
SELECT f.title, COUNT(fa.actor_id) AS
total_actors
FROM film f
LEFT JOIN film_actor fa
ON f.film_id = fa.film_id
GROUP BY f.film_id
ORDER BY total_actors DESC;
```

title	total_actors
LAMBS CINCINATTI	15
BOONDOCK BALLROOM	13
CHITTY LOCK	13
CRAZY HOME	13
DRACULA CRYSTAL	13



count of actors	Count of films
15	1
13	6
12	6
11	14
10	21
9	49
8	90
7	119
6	150
5	195
4	137
3	119
2	69
1	21
0	3
Grand Total	1000