

--PAYMENT TABLE--

```
SELECT MIN(amount) as min_payment,  
MAX(amount) as max_payment,  
AVG (amount) as average_payment,  
COUNT (amount) as count_payment_values,  
COUNT (*) as count_rows  
from payment  
-----
```

---FILM TABLE-----

```
SELECT MIN(rental_duration) as min_rental_duration,  
MAX(rental_duration) as max_rental_duration,  
AVG (rental_duration) as average_rental_duration,  
COUNT (rental_duration) as count_rental_duration_values,  
COUNT (*) as count_rows  
from film
```

```
SELECT MIN(rental_rate) as min_rental_rate,  
MAX(rental_rate) as max_rental_rate,  
AVG (rental_rate) as average_rental_rate,  
COUNT (rental_rate) as count_rental_rate_values,  
COUNT (*) as count_rows  
from film
```

```
SELECT MIN(length) as min_length,  
MAX(length) as max_length,  
AVG (length) as average_length,  
COUNT (length) as count_length_values,  
COUNT (*) as count_rows  
from film
```

```
SELECT MIN(replacement_cost) as min_replacement_cost,  
MAX(replacement_cost) as max_replacement_cost,  
AVG (replacement_cost) as average_replacement_cost,  
COUNT (replacement_cost) as count_replacement_cost_values,  
COUNT (*) as count_rows  
from film
```

FROM CUSTOMER TBALE

```
SELECT MODE () within group (order by first_name)  
As modal_value  
FROM customer
```

```
SELECT MODE () within group (order by last_name)  
As modal_value
```

```
FROM customer
---FROM ACTOR TABLE--
SELECT MODE () within group (order by first_name)
As modal_value
FROM actor
```

```
SELECT MODE () within group (order by last_name)
As modal_value
FROM actor
```

```
--FROM FILM--
SELECT MODE () within group (order by release_year)
As modal_value_release_year
FROM film
```

```
SELECT MODE () within group (order by rating)
As modal_value_rating
FROM film
```

```
--FROM CATEGORY--
SELECT MODE () within group (order by name)
As modal_value_genre
FROM category
```

```
--FROM CITY--
SELECT MODE () within group (order by city)
As modal_value_city
FROM city
```

```
--FROM LANGUAGE--
SELECT MODE () within group (order by name)
As modal_value_language
FROM language
```

--3.7 Q1 CUSTOMER COUNT BY COUNTRY

```
Select D.country,COUNT(A.customer_id)
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 D.country
order by COUNT(A.customer_id) DESC
LIMIT 10
```

---3.7 Q2 count of customers by top country's cities--

```
SELECT D.country, C.city, COUNT(customer_id)
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 country IN ('India','China','United States','Japan','Mexico','Brazil','Russian Federation','Philippines','Turke
GROUP BY city, country
ORDER BY COUNT(customer_id) DESC
LIMIT 10
```

---3.7 Q WHO ARE THE TOP CUSTOMERS--

```
SELECT A.customer_id, A.first_name, A.last_name, C.city, D.country, SUM (E.amount) as total_amount_paid
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
INNER JOIN payment e on A.customer_id=E.customer_id
WHERE city IN ('Aurora','Atlixco','Xintai','Adoni','Dhule (Dhulia)','Kurashiki','Pingxiang','Sivas','Celaya','So Leopold
GROUP BY A.customer_id, A.first_name, A.last_name, C.city, D.country
ORDER BY SUM (E.amount)
LIMIT 5
```

--Income by type--

--GENRE--

```
SELECT E.Name as genre, SUM(A.amount) as sum_of_profit
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 SUM(a.amount) DESC
```

--Rating--

```
SELECT D.rating, SUM(A.amount) as sum_of_profit
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
ORDER BY SUM(a.amount) DESC
```

--Length--

```
SELECT D.length, SUM(A.amount) as sum_of_profit
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.length
ORDER BY SUM(a.amount) DESC
```

--Actor--

```
SELECT E.first_name, E.last_name, SUM(A.amount) as sum_of_profit
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_actor d on c.film_id=d.film_id
INNER JOIN actor e on d.actor_id=e.actor_id
Group by E.first_name, E.last_name
ORDER BY SUM(A.amount) DESC
LIMIT 10
```

--PROFIT BY TOP 10 COUNTRY--

--Genre--

```
SELECT i.country, E.name as genre, 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_category d on c.film_id=d.film_id
INNER JOIN category e on d.category_id=e.category_id
INNER JOIN customer f on a.customer_id=f.customer_id
INNER JOIN address g on f.address_id=g.address_id
INNER JOIN city h on g.city_id=h.city_id
INNER JOIN country i on h.country_id=i.country_id
WHERE country IN ('India','China','United States','Japan','Mexico','Brazil','Russian Federation','Philippines','Turkey')
Group by i.country,E.name
ORDER BY SUM (A.amount) DESC
```

--Rating--

```
SELECT i.country, D.rating, SUM(A.amount) as sum_of_profit
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
INNER JOIN customer f on a.customer_id=f.customer_id
INNER JOIN address g on f.address_id=g.address_id
INNER JOIN city h on g.city_id=h.city_id
INNER JOIN country l on h.country_id=i.country_id
WHERE country IN ('India','China','United States','Japan','Mexico','Brazil','Russian Federation','Philippines','Turkey')
GROUP BY i.country, D.rating
ORDER BY SUM(A.amount) DESC
```

--LENGTH OF FILM--

```
SELECT i.country, D.length, SUM(A.amount) as sum_of_profit
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
INNER JOIN customer f on a.customer_id=f.customer_id
INNER JOIN address g on f.address_id=g.address_id
INNER JOIN city h on g.city_id=h.city_id
INNER JOIN country l on h.country_id=i.country_id
WHERE country IN ('India','China','United States','Japan','Mexico','Brazil','Russian Federation','Philippines','Turkey')
GROUP BY i.country, D.length
ORDER BY SUM(A.amount) DESC
```

--ACTOR--

```
SELECT i.country, E.first_name, E.last_name, SUM(A.amount) as sum_of_profit
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_actor d on c.film_id=d.film_id
INNER JOIN actor e on d.actor_id=e.actor_id
INNER JOIN customer f on a.customer_id=f.customer_id
INNER JOIN address g on f.address_id=g.address_id
INNER JOIN city h on g.city_id=h.city_id
INNER JOIN country l on h.country_id=i.country_id
WHERE country IN ('India','China','United States','Japan','Mexico','Brazil','Russian Federation','Philippines','Turkey')
GROUP BY i.country, e.first_name, e.last_name
ORDER BY SUM(A.amount) DESC
```

--Top 5 customers favorite genres--

```
SELECT f.customer_id, f.first_name, f.last_name, e.name, 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_category d on c.film_id=d.film_id
INNER JOIN category e on d.category_id=e.category_id
INNER JOIN customer f on a.customer_id=f.customer_id
INNER JOIN address g on f.address_id=g.address_id
INNER JOIN city h on g.city_id=h.city_id
INNER JOIN country i on h.country_id=i.country_id
WHERE f.customer_id in(330,564,440,169,34)
GROUP BY f.customer_id,f.first_name,f.last_name,e.name
ORDER BY Sum(a.amount) DESC
```