

Nama : Diemas Aksya Fachriza

Kelompok : DS-1

1. A customer wants to know the films about 'ancient'. How many recommendations could you give for him?

SQL Code

```
select
    count(*) films_about_ancient_amnts
from
    film
where
    fulltext @@ to_tsquery('ancient')
```

Result

	123 films_about_ancient_amnts
1	124

I could recommend 124 films regarding 'ancient'.

2. I wonder, how many films have a rating of "R" and a replacement cost between \$5 and \$15?

SQL Code

```
select
    count(*) film_amounts
from
    film
where
    rating = 'R'
    and replacement_cost between 5.00 and 15.00
```

Result

123 film_amounts
52

There are 52 films with the above condition.

3. We have two staff members with staff IDs 1 and 2. We want to give a bonus to the staff member that handled the most payments. How many payments did each staff member handle? And how much was the total amount processed by each staff member

SQL Code

```
select
    s.staff_id,
    concat(first_name, ' ', last_name) staff_name,
    count(p.payment_id) processed_payments,
    sum(p.amount) total_amounts_processed
from
    staff s
join payment p on
    p.staff_id = s.staff_id
group by
    s.staff_id
```

Result

staff_id	staff_name	processed_payments	total_amounts_processed
1	Mike Hillyer	7,292	30,252.12
2	Jon Stephens	7,304	31,059.92

Jon Stephens handled and processed more payment amounts. He deserve the bonus.

- Corporate headquarters is auditing the store, they want to know the average replacement cost of movies by rating

SQL Code

```
select
    rating,
    avg(replacement_cost) avg_replacement_cost
from
    film
group by
    rating
```

Result

rating	avg_replacement_cost
NC-17	20.1376190476
G	20.1248314607
PG	18.9590721649
PG-13	20.4025560538
R	20.231025641

The above are the replacement cost of each genre.

- We want to send coupons to the 5 customers who have spent the most amount of money. Get the customer name, email and their spent amount!

SQL Code

```
select
    concat(c.first_name, ' ', c.last_name) customer_name,
    c.email,
    sum(p.amount) total_spent
from
    customer c
join payment p on
    p.customer_id = c.customer_id
group by
    c.first_name,
    c.last_name,
    c.email
order by
    total_spent desc
limit 5
```

Result

customer_name	email	total_spent
Eleanor Hunt	eleanor.hunt@sakilacustomer.org	211.55
Karl Seal	karl.seal@sakilacustomer.org	208.58
Marion Snyder	marion.snyder@sakilacustomer.org	194.61
Rhonda Kennedy	rhonda.kennedy@sakilacustomer.org	191.62
Clara Shaw	clara.shaw@sakilacustomer.org	189.6

These 5 customers spent the most amount of money. They deserve the coupons.

6. I wonder, how many distinct users have rented each genre? And what is the average rental rate per movie genre? (from the highest to the lowest rental rate)

SQL Code

```
select
  c."name" genre_name,
  count(distinct(r.customer_id)) unique_rent_amounts,
  avg(f.rental_rate) avg_rent_rate
from
  rental r
join inventory i on
  r.inventory_id = i.inventory_id
join film f on
  i.film_id = f.film_id
join film_category fc on
  fc.film_id = f.film_id
join category c on
  fc.category_id = c.category_id
group by
  c."name"
order by
  avg_rent_rate desc
```

Result

genre_name	unique_rent_amounts	avg_rent_rate
Travel	442	3.3173596177
Comedy	495	3.2833049947
Drama	501	3.1824528302
Games	474	3.1303508772
Horror	451	3.1011111111
New	468	3.09
Sports	519	3.0680322307
Music	447	3.0622891566
Sci-Fi	507	2.9881834696
Foreign	493	2.95321394
Animation	500	2.7601543739
Family	501	2.6998540146
Children	482	2.6894708995
Action	510	2.668057554
Classics	468	2.6385623003
Documentary	483	2.6166666667

7. We want to know what customers are eligible for our platinum credit card. The requirements are that the customer has at least a total of 40 transaction payments. Get the customer name, email who are eligible for the credit card!

SQL Code

```

select
  concat(c.first_name, ' ', c.last_name) customer_name,
  c.email,
  count(p.payment_id) transaction_amounts
from
  customer c
join payment p on
  p.customer_id = c.customer_id
group by
  c.first_name,
  c.last_name,
  c.email
having
  count(p.payment_id) >= 40
order by
  transaction_amounts desc

```

Result

ABC customer_name	ABC email	123 transaction_amounts
Eleanor Hunt	eleanor.hunt@sakilacustomer.org	45
Karl Seal	karl.seal@sakilacustomer.org	42
Clara Shaw	clara.shaw@sakilacustomer.org	40

These 3 customers are eligible for the platinum credit card.