Solutions :

1. select f.title

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 = "Comedy" and f.rating = "PG-13";

2. select f.title

from film f

join film\_category fc on f.film\_id = fc.film\_id

join category c on fc.category\_id = c.category\_id

join inventory i on i.film\_id = fc.film\_id

join rental r on r.inventory\_id = i.inventory\_id

where c.name = "Horror" group by title

order by count(title) desc limit 3;

3. select distinct c.first\_name, c.last\_name, cnt.country, cat.name

from customer c

join rental r on r.customer\_id = c.customer\_id

join address a on a.address\_id = c.address\_id

join city cty on cty.city\_id = a.city\_id

join country cnt on cnt.country\_id = cty.country\_id

join inventory i on i.inventory\_id = r.inventory\_id

join film\_category fc on fc.film\_id = i.film\_id

join category cat on cat.category\_id = fc.category\_id

where cat.name = "Sports" and cnt.country = "India";

4. select distinct c.first\_name, cnt.country, atr.first\_name

from customer c

join rental r on r.customer\_id = c.customer\_id

join inventory i on i.inventory\_id = r.inventory\_id

join address a on a.address\_id = c.address\_id

join city cty on cty.city\_id = a.city\_id

join country cnt on cnt.country\_id = cty.country\_id

join film\_actor fa on fa.film\_id = i.film\_id

join actor atr on atr.actor\_id = fa.actor\_id

where atr.first\_name = "SEAN" and atr.last\_name = "WILLIAMS" and cnt.country = "Canada";

5. select count(\*) as number\_of\_movies

from actor a

join film\_actor fa on fa.actor\_id = a.actor\_id

join film f on f.film\_id = fa.film\_id

where a.first\_name = "SEAN" and a.last\_name = "WILLIAMS";