**Q1. Identify the primary keys and foreign keys in maven movies db. Discuss the differences ?**

**ANS:-**

List of all Primary Keys in mavenmovies database:

|  |  |
| --- | --- |
| **Table Name** | **Column Name** |
| actor | actor\_id |
| actor\_award | actor\_award\_id |
| address | address\_id |
| advisor | advisor\_id |
| category | category\_id |
| city | city\_id |
| country | country\_id |
| customer | customer\_id |
| film | film\_id |
| film\_actor | actor\_id |
| film\_actor | film\_id |
| film\_category | category\_id |
| film\_category | film\_id |
| film\_text | film\_id |
| inventory | inventory\_id |
| investor | investor\_id |
| language | language\_id |
| payment | payment\_id |
| rental | rental\_id |
| staff | staff\_id |
| store | store\_id |

**List of all Foreign Keys in mavenmovies database:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Table Name** | **Referenced Table** | **Name of constraint** | **Column Name** |
| address | city | fk\_address\_city | city\_id |
| city | country | fk\_city\_country | country\_id |
| customer | address | fk\_customer\_address | address\_id |
| customer | store | fk\_customer\_store | store\_id |
| film | language | fk\_film\_language | language\_id |
| film | language | fk\_film\_language\_original | original\_language\_id |
| film\_actor | actor | fk\_film\_actor\_actor | actor\_id |
| film\_actor | film | fk\_film\_actor\_film | film\_id |
| film\_category | category | fk\_film\_category\_category | category\_id |
| film\_category | film | fk\_film\_category\_film | film\_id |
| inventory | film | fk\_inventory\_film | film\_id |
| inventory | store | fk\_inventory\_store | store\_id |
| payment | customer | fk\_payment\_customer | customer\_id |
| payment | rental | fk\_payment\_rental | rental\_id |
| payment | staff | fk\_payment\_staff | staff\_id |
| rental | customer | fk\_rental\_customer | customer\_id |
| rental | inventory | fk\_rental\_inventory | inventory\_id |
| rental | staff | fk\_rental\_staff | staff\_id |
| staff | address | fk\_staff\_address | address\_id |
| staff | store | fk\_staff\_store | store\_id |
| store | address | fk\_store\_address | address\_id |
| store | staff | fk\_store\_staff | manager\_staff\_id |

**Primary key:** primary key is a unique constraint of any table that is used to identify or access the table. This can never be a null or duplicate value.

**Foreign key:** it is one of the unique attribute that can be used to build the relation between two different table again this cannot be null or duplicate as well.

Q2. **List all details of actors**

**Ans:-** Select \* from actor;

**--All rows from Actor table.**

**Other Ans:**

FLM.title AS 'Movie Name',

FLM.description AS 'Movie Description',

FLM.release\_year AS 'Release Year'

FROM

actor AS ATR INNER JOIN film\_actor AS FATR

ON ATR.actor\_id = FATR.actor\_id

INNER JOIN film AS FLM ON FATR.film\_id = FLM.film\_id

ORDER BY ATR.first\_name

**-- Actors and their respective films**

**Q3. List all customer information from DB.?**

**Ans:-** SELECT \* FROM Customer;

**Q4.** **List different countries?**

**Ans:-** SELECT \* FROM country;

**Q5. Display all active customers?**

**Ans:-** SELECT \* FROM customer where active = 1

**Q.6 Display all active customers?**

**Ans:-** SELECT \* FROM rental where customer\_id = 1

**Q7. Display all the films whose rental duration is greater than 5 ?**

**Ans:-** SELECT \* FROM film where rental\_duration >5;

**Q8. List the total number of films whose replacement cost is greater than $15 and less than $20**

**Ans:-** SELECT COUNT(\*) AS 'Counts of films' FROM film WHERE replacement\_cost >15 AND replacement\_cost<20;

**Q9. Display the count of unique first names of actors.**

As per the question, we may have two answers, depending on the meaning of the question.

**ANSWER 1: List of only those names which do not repeat in the column *first\_name* of table *actors*.**

SELECT

first\_name, COUNT(first\_name)

FROM actor

GROUP BY(first\_name)

HAVING COUNT(first\_name) = 1

ORDER BY COUNT(first\_name) DESC;

**ANSWER 2: List of DISTINCT names in the column *first\_name* of table *actors*.**

SELECT DISTINCT first\_name FROM actor ORDER BY first\_name;

**Q10. Display the first 10 records from the customer table**

**Ans:-** SELECT \* FROM customer LIMIT 10

**Q11. Display the first 3 records from the customer table whose first name starts with ‘b’.**

**Ans:-** SELECT \* FROM customer WHERE first\_name LIKE 'B%' LIMIT 3;

**Q12. Display the names of the first 5 movies which are rated as ‘G’?**

**Ans:-** SELECT \* FROM film WHERE rating = 'G' LIMIT 5;

**Q 13. Find all customers whose first name starts with "a".**

**Ans:-** SELECT \* FROM customer WHERE first\_name LIKE 'a%';

**Q 14. Find all customers whose first name ends with "a".**

**Ans:** select first\_name from customer where first\_name like 'a%';

**Q 15. Display the list of first 4 cities which start and end with ‘a’**

**Ans:** select \* from customer where first\_name like "%a";

**2nd Ans:** select concat (first\_name, "",last\_name) as name from customer where first\_name like '%a';

**Q 16. Find all customers whose first name have "NI" in any position?**

**Ans:** select \* from city where city like "a%a" limit 4;

**Q 17. Find all customers whose first name have "r" in the second position ?**

**Ans:** select \* from customer where first\_name like '%NI%';

**Q 18. Find all customers whose first name starts with "a" and are at least 5 characters in length?**

**Ans:** select \* from customer where first\_name like '%\_r%';

**Q 19. Find all customers whose first name starts with "a" and ends with "o" ?**

**Ans:** select \* from customer where first\_name like 'a%' and length (first\_name) >=5;

**Q 20. Get the films with pg and pg-13 rating using IN operator ?**

**Ans:** select \* from customer where first\_name like 'a%o';

**Q 21. Get the films with length between 50 to 100 using between operator ?**

**Ans:** select \* from film;

select \* from film where rating in ('PG', 'PG-13');

**Q 22. Get the top 50 actors using limit operator ?**

**Ans:** select title, length from film where length between 50 and 100;

**Q 23. Get the distinct film ids from inventory table ?**

**Ans:** select \* from actor limit 50;

**Q 24. Query: Get the distinct film ids from inventory table ?**

**Ans:** select distinct ( film\_id) from inventory;