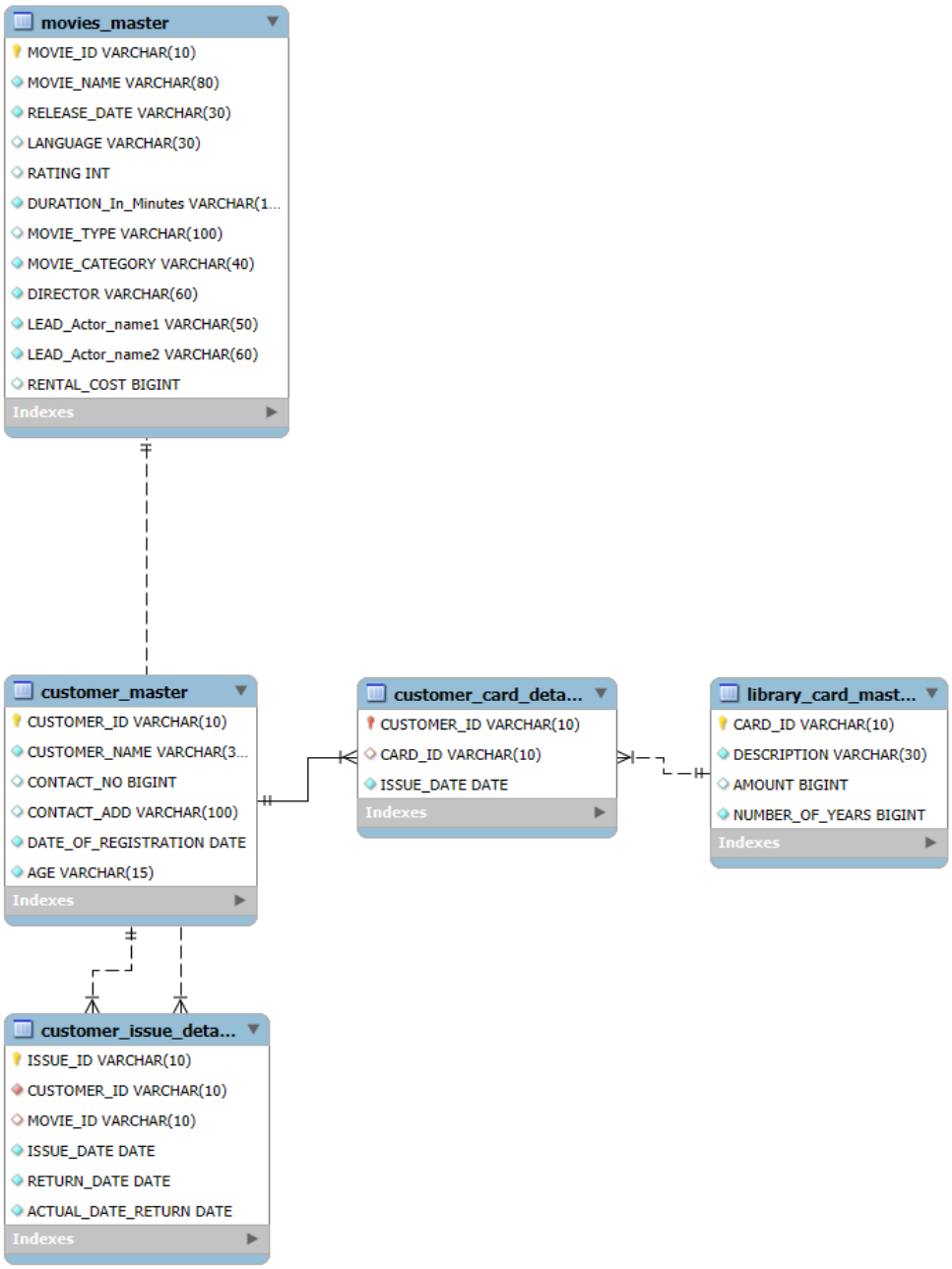
Surya Prakash M
14/7/2025

ER Diagram:



Surya Prakash M
14/7/2025

DDL Query:

```
 create table CUSTOMER_MASTER
(
        CUSTOMER_ID Varchar(10),
        CUSTOMER_NAME Varchar(30) NOT NULL,
        CONTACT_NO BIGINT(20),
        CONTACT_ADD Varchar(100),
        DATE_OF_REGISTRATION Date NOT NULL,
        AGE Varchar(15)NOT NULL,
        Constraint MT_cts1 PRIMARY KEY(CUSTOMER_ID)
);
 Create table CUSTOMER_ISSUE_DETAILS
(
        ISSUE_ID Varchar(10) NOT NULL,
        CUSTOMER_ID Varchar(10) NOT NULL,
        MOVIE_ID VARCHAR(10),
        ISSUE_DATE Date NOT NULL,
        RETURN_DATE Date NOT NULL,
ACTUAL_DATE_RETURN Date NOT NULL,
        Constraint MT_cts5 PRIMARY KEY(ISSUE_ID),
Constraint MT_Mem FOREIGN KEY(CUSTOMER_ID) References
CUSTOMER_MASTER(CUSTOMER_ID),
Constraint MT_Mem1 FOREIGN KEY(MOVIE_ID) References MOVIES_MASTER(MOVIE_ID));
```

Surya Prakash M
14/7/2025

```
 Create table MOVIES_MASTER
(
        MOVIE_ID Varchar(10),
        MOVIE_NAME Varchar(80) NOT NULL,
        RELEASE_DATE Varchar(30) NOT NULL,
        LANGUAGE Varchar(30),
        RATING int(2),
        DURATION_In_Minutes VARCHAR(10) NOT NULL,
        MOVIE_TYPE Varchar(100),
        MOVIE_CATEGORY VARCHAR(40) NOT NULL,
        DIRECTOR VARCHAR(60) NOT NULL,
        LEAD_Actor_name1 Varchar(50) NOT NULL,
        LEAD_Actor_name2 VARCHAR(60) NOT NULL,
        RENTAL_COST BIGINT(10),
        Constraint MT_cts4 PRIMARY KEY(MOVIE_ID)
);


 Create table LIBRARY_CARD_MASTER
(
        CARD_ID Varchar(10),
        DESCRIPTION Varchar(30) NOT NULL,
        AMOUNT      BIGINT(50),
        NUMBER_OF_YEARS bigint(10) NOT NULL,
        Constraint MT_cts2 PRIMARY KEY(CARD_ID));
 Create table CUSTOMER_CARD_DETAILS
```

Surya Prakash M
14/7/2025

```
(
        CUSTOMER_ID Varchar(10),
        CARD_ID VARCHAR(10),
        ISSUE_DATE DATE NOT NULL,
        Constraint MT_cts3 PRIMARY KEY(CUSTOMER_ID),
        Constraint MT_CTS41 FOREIGN KEY(CUSTOMER_ID) References
CUSTOMER_MASTER(CUSTOMER_ID),
Constraint MT_CTS42 FOREIGN KEY(CARD_ID) References
LIBRARY_CARD_MASTER(CARD_ID)
);
```

Queries :

1. Write a query to display movie names and number of times that movie is issued to customers. In case movies are never issued to customers display number of times as 0.

```
710
711 •   select m.Movie_Name ,COUNT(i.Movie_ID) AS ISSUE_COUNT from movies_master m
712     LEFT JOIN Customer_issue_details i ON
713     m.Movie_ID = i.Movie_ID
714     GROUP BY i.Movie_ID,m.Movie_Name
715     ORDER BY ISSUE_COUNT DESC,m.Movie_Name;
716
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Movie_Name	ISSUE_COUNT
DIE HARD	4
GONE WITH THE WIND	3
CASABLANCA	2
SHAUN OF THE DEAD	2
THE DARK KNIGHT	2
TITANIC	2
INCEPTION	1

Result 76

Surya Prakash M
14/7/2025

2. Write a query to display id, name, age, contact no of customers whose age is greater than 25 and who have registered in the year 2012. Display contact no in the below format +91-XXX-XXX-XXXX example +91-987-678-3434 and use the alias name as "CONTACT_ISD". If the contact no is null then display as 'N/A' Sort all the records in ascending order based on age and then by name.

```
718  select Customer_ID,Customer_Name,IFNULL(concat('+91-',substring(Contact_No,1,3),'-',
719  substring(Contact_No,4,3),'-',substring(Contact_No,7,4)),'N\A') AS CONTACT_ISD
720  from customer_master WHERE Age > 25 AND YEAR(Date_of_Registration) = 2012
721  ORDER BY Age,Customer_Name;
722
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Customer_ID	Customer_Name	CONTACT_ISD
C00005	SHIV PRASAD	NA
C00007	GEETHA REDDY	+91-897-616-7890
C00002	AGNESH	+91-892-315-6781
C00004	RAJIB MITRA	+91-983-035-6781

3. Write a query to display the movie category and number of movies in that category. Display records based on number of movies from higher to lower order and then by movie category in ascending order.

Hint: Use NO_OF_MOVIES as alias name for number of movies.

```
723
724  select Movie_category,Count(Movie_ID) AS NO_OF_MOVIES from movies_master
725  Group BY Movie_category ORDER BY NO_OF_MOVIES DESC,Movie_category;
726
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Movie_category	NO_OF_MOVIES
ACTION	4
ROMANCE	4
COMEDY	3

Surya Prakash M
14/7/2025

4. Write a query to display the number of customers having card with description “Gold card”. Use CUSTOMER_COUNT as alias name for number of customers.

```
731 •   select COUNT(c.card_ID) AS CUSTOMER_COUNT from customer_card_details c
732     INNER JOIN library_card_master  cm ON
733     c.Card_ID = cm.Card_ID WHERE cm.Description LIKE '%GOLD CARD%';
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

CUSTOMER_COUNT
2

5. Write a query to display the customer id, customer name, year of registration, library card id, card issue date of all the customers who hold library card. Display the records sorted by customer name in descending order. Use REGISTERED_YEAR as alias name for year of registration.

```
736
737 •   select c.Customer_ID,c.Customer_name,YEAR(c.Date_of_Registration) AS REGISTERED_YEAR ,
738     cd.card_id,cd.issue_date
739     from customer_master c inner join customer_card_details cd
740     ON c.Customer_ID = cd.Customer_ID
741     ORDER BY c.Customer_name desc;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Customer_ID	Customer_name	REGISTERED_YEAR	card_id	issue_date
C00004	RAJIB MITRA	2012	CRD003	2013-05-13
C00003	T RAMACHANDRAN	2012	CRD002	2013-05-13
C00005	SHIV PRASAD	2012	CRD003	2012-05-13
C00001	NITIN	2012	CRD001	2012-10-15
C00002	AGNESH	2012	CRD002	2012-05-13

Surya Prakash M
14/7/2025

6. Write a query to display issue id, customer id, customer name for the customers who have paid fine and whose name starts with 'R'. Fine is calculated based on return date and actual date of return. If the date of actual return is after date of return then fine need to be paid by the customer.

```
742
743 •  select i.ISSUE_ID,i.Customer_ID,c.Customer_Name from customer_issue_details i
744    INNER JOIN customer_master c on i.Customer_ID = c.Customer_ID
745    WHERE i.Return_Date<i.Actual_date_return AND c.Customer_name LIKE 'R%' ORDER BY c.Customer_Name;
746
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

ISSUE_ID	Customer_ID	Customer_Name
I00008	C00010	RAGHAV SINGH
I00007	C00004	RAJIB MITRA

7. Write a query to display customer id, customer name, card id, card description and card amount in dollars of customers who have taken movie on the same day the library card is registered. For Example Assume John registered a library card on 12th Jan 2013 and he took a movie on 12th Jan 2013 then display his details. AMOUNT_DOLLAR = amount/85.8 and round it to zero decimal places and display as $Amount. Example Assume 500 is the amount then dollar value will be $10. Use AMOUNT_DOLLAR as alias name for amount in dollar. Display the records in ascending order based on customer name.

```
747 •  select c.Customer_ID,c.Customer_Name,cd.Card_ID,cm.Description,concat('$',ROUND(cm.Amount/85.8,0))
748    AS AMOUNT_DOLLAR from customer_master c INNER JOIN customer_card_details cd
749    ON c.Customer_ID = cd.Customer_ID INNER JOIN library_card_master cm on
750    cd.Card_id = cm.Card_id INNER JOIN customer_issue_Details ci on cd.Customer_ID = ci.Customer_ID
751    AND ci.Issue_Date = cd.Issue_Date;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Customer_ID	Customer_Name	Card_ID	Description	AMOUNT_DOLLAR
C00001	NITIN	CRD001	SILVER CARD	$12

Surya Prakash M
14/7/2025

8. Write a query to display the customer name and number of movies issued to that customer sorted by customer name in ascending order. If a customer has not been issued with any movie then display 0. Use MOVIE_COUNT as alias name for number of movies issued.

```
752
753 •  select c.Customer_name,COUNT(Movie_ID) AS MOVIE_COUNT from customer_master c
754    LEFT join customer_issue_details ci on ci.Customer_ID = c.Customer_ID
755    group by C.Customer_ID,C.customer_name ORDER BY c.Customer_ID;
756
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Customer_name	MOVIE_COUNT
NITIN	2
AGNESH	3
T RAMACHANDRAN	8
RAJIB MITRA	4
SHIV PRASAD	0
AJAY GHOSH	0
GEETHA REDDY	0

9. Write a query to display the issue id, issue date, customer id, customer name and contact number for videos that are issued in the year 2013.Display the records in descending order based on issue date of the video.

```
757 •  select cd.Issue_ID,cd.Issue_Date,c.customer_name,c.contact_no from
758    customer_issue_Details cd inner JOIN customer_master c  ON  cd.Customer_ID = c.Customer_ID
759    where YEAR(cd.Issue_date) = 2013 ORDER BY cd.Issue_Date DESC;
760
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Issue_ID	Issue_Date	customer_name	contact_no
I00012	2013-11-28	NITIN	9830354218
I00017	2013-04-15	T RAMACHANDRAN	9831289761
I00009	2013-03-16	RAJ SEKHANRAN	8423178906
I00016	2013-03-05	T RAMACHANDRAN	9831289761
I00008	2013-03-02	RAGHAV SINGH	9675167890
I00015	2013-02-03	T RAMACHANDRAN	9831289761
I00014	2013-01-02	T RAMACHANDRAN	9831289761

Surya Prakash M
14/7/2025

10. Write a query to display the director's name, number of movies directed by the director who directed more than one movie. Display the director name in capital letters. Use DIRECTOR_NAME as alias name for director name column Display the records sorted in ascending order based on director_name.

```
762
763 •  select UPPER(Director) AS DIRECTOR_NAME,COUNT(MOVIE_ID) AS 'number of movies' from movies_master
764    group by DIRECTOR HAVING COUNT(MOVIE_ID)>1
765    ORDER BY DIRECTOR_NAME;
766
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

DIRECTOR_NAME	number of movies
CHRISTOPHER NOLAN	2