

Video Management database queries:

1. Please follow instructions given below.

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.

Display the details in sorted order based on number of times (in descending order) and then by movie name (in ascending order).

The Alias name for the number of movies issued is **ISSUE_COUNT**.

11 rows

```
select mm.movie_name, count(cid.issue_id) as ISSUE_COUNT
from movies_master mm left outer join customer_issue_details
cid on mm.movie_id=cid.movie_id group by mm.movie_name
order by ISSUE_COUNT desc,mm.movie_name asc;
```

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
OFFICE SPACE	1

THE MATRIX	1
YOUNG FRANKENSTEIN	1
THE NOTEBOOK	0

2. Please follow instructions given below.

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.

4 rows

select customer_id,customer_name,age,

ifnull(concat('+91-',substring(contact_no,1,3),'-',substring(contact_no,4,3),'-',substring(contact_no,7,4)), 'N/A')

as CONTACT_ISD from customer_master where age>25 and year(date_of_registration)=2012

order by age,customer_name;

CUSTOMER_ID	CUSTOMER_NAME	AGE	CONTACT_ISD
C00007	GEETHA REDDY	30	+91-897-616-7890
C00005	SHIV PRASAD	30	N/A
C00002	AGNESH	35	+91-892-315-6781
C00004	RAJIB MITRA	45	+91-983-035-6781

3. Please follow instructions given below.

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.

3 rows

Ans:

```
select movie_category,count(movie_id) as NO_OF_MOVIES from movies_master group by
movie_category
```

```
order by NO_OF_MOVIES desc,movie_category asc;
```

MOVIE_CATEGORY	NO_OF_MOVIES
ACTION	4
ROMANCE	4
COMEDY	3

4.Please follow instructions given below.

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

1 row

```
select count(ccd.customer_id) as CUSTOMER_COUNT from customer_card_details ccd join
library_card_master lcd on ccd.card_id=lcd.card_id where lcd.description='Gold Card';
```

CUSTOMER_COUNT
2

4.Please follow instructions given below.

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.

5 rows

```
select cm.customer_id,cm.customer_name,year(cm.date_of_registration) as  
REGISTERED_YEAR,ccd.card_id,ccd.issue_date  
  
from customer_master cm join customer_card_details ccd on cm.customer_id=ccd.customer_id  
  
order by cm.customer_name desc;
```

CUSTOMER_ID	CUSTOMER_NAME	REGISTERED_YEAR	CARD_ID	ISSUE_DATE
C00003	T RAMACHANDRAN	2012	CRD002	2012-11-02
C00005	SHIV PRASAD	2012	CRD003	2012-12-26
C00004	RAJIB MITRA	2012	CRD003	2012-11-21
C00001	NITIN	2012	CRD001	2012-10-15
C00002	AGNESH	2012	CRD002	2012-12-01

5.Please follow instructions given below.

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.

Display the records sorted in ascending order based on customer name.

2 rows

```
select cid.issue_id,cid.customer_id,cm.customer_name from customer_issue_details cid join  
customer_master cm on cid.customer_id=cm.customer_id where cm.customer_name like 'R%'  
  
and cid.actual_date_return>cid.return_date order by cm.customer_name;
```

ISSUE_ID	CUSTOMER_ID	CUSTOMER_NAME
I00008	C00010	RAGHAV SINGH

I00007	C00004	RAJIB MITRA
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6. Please follow instructions given below.

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/52.42 and round it to zero decimal places and display as \$Amount.

Example Assume 500 is the amount then dollar value will be \$10.

Hint: Use AMOUNT_DOLLAR as alias name for amount in dollar.

Display the records in ascending order based on customer name.

```
SELECT ccd.customer_id, customer_name, ccd.card_id, description, concat('$',round(amount/52.42,0))
AMOUNT_DOLLAR FROM customer_master cm INNER JOIN customer_card_details ccd ON
cm.customer_id=ccd.customer_id INNER JOIN library_card_master lcm ON ccd.card_id=lcm.card_id
INNER JOIN customer_issue_details cid ON cid.customer_id = cm.customer_id WHERE
cm.date_of_registration=cid.issue_date order by customer_name;
```

CUSTOMER_ID	CUSTOMER_NAME	CARD_ID	DESCRIPTION	AMOUNT_DOLLAR
C00001	NITIN	CRD001	SILVER CARD	\$19
C00004	RAJIB MITRA	CRD003	PLATINUM CARD	\$57
C00003	T RAMACHANDRAN	CRD002	GOLD CARD	\$38

7. Please follow instructions given below.

Write a query to display the customer id, customer name, contact number and address of customers who have taken movies from library without library card and whose address ends with 'Nagar'.

Display customer name in upper case. Hint: Use CUSTOMER_NAME as alias name for customer name.
Display the details sorted in ascending order based on customer name.

SELECT customer_id , upper(customer_name) CUSTOMER_NAME,contact_no,contact_address FROM customer_master WHERE customer_id NOT IN (select customer_id from customer_card_details) AND customer_id IN (SELECT customer_id from customer_issue_details) and contact_address like '%Nagar' order by customer_name ;

CUSTOMER_ID	CUSTOMER_NAME	CONTACT_NO	CONTACT_ADDRESS
C00010	RAGHAV SINGH	9675167890	A/6 NEHRU JAWAHAR NAGAR

8.Please follow instructions given below.

Write a query to display the movie id, movie name,release year,director name of movies acted by the leadactor1 who acted maximum number of movies .Display the records sorted in ascending order based on movie name.

select movie_id,movie_name , release_year ,director_name from movies_master where lead_actor_name1 in(select lead_actor_name1 from(select lead_actor_name1,count(movie_id) ct from movies_master group by lead_actor_name1)t where t.ct>=all(select count(movie_id) from movies_master group by lead_actor_name1))order by movie_name;

MOVIE_ID	MOVIE_NAME	RELEASE_YEAR	DIRECTOR_NAME
M00004	INCEPTION	2010	CHRISTOPHER NOLAN
M00011	TITANIC	1997	JAMES CAMERON

9.Please follow instructions given below.

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.

Hint: Use MOVIE_COUNT as alias name for number of movies issued.

11 rows

```
select cm.customer_name,count(cid.movie_id) as MOVIE_COUNT from customer_master cm left join  
customer_issue_details cid on cm.customer_id=cid.customer_id group by cm.customer_name order by  
cm.customer_name;
```

CUSTOMER_NAME	MOVIE_COUNT
AGNESH	3
AJAY GHOSH	0
GEETHA REDDY	0
NITIN	2
RAGHAV SINGH	1
RAJ SEKHANRAN	1
RAJAN PILLAI	0
RAJIB MITRA	4
RIA NATRAJAN	0
SHIV PRASAD	0
T RAMACHANDRAN	8

10.Please follow instructions given below.

Write a query to display serial number,issue id, customer id, customer name, movie id and movie name of all the videos that are issued and display in ascending order based on serial number.

Serial number can be generated from the issue id , that is last two characters of issue id is the serial

number.

For Example Assume the issue id is I00005 then the serial number is 05

Hint: Alias name for serial number is 'SERIAL_NO'

19 rows

```
select substring(cid.issue_id,5,2) as  
SERIAL_NO,cid.issue_id,cid.customer_id,cm.customer_name,mm.movie_id,mm.movie_name  
  
from customer_issue_details cid join customer_master cm on cm.customer_id=cid.customer_id  
  
join movies_master mm on cid.movie_id=mm.movie_id group by  
SERIAL_NO,cid.customer_id,mm.movie_id  
  
order by SERIAL_NO;
```

SERIAL_NO	ISSUE_ID	CUSTOMER_ID	CUSTOMER_NAME	MOVIE_ID	MOVIE_NAME
01	I00001	C00001	NITIN	M00001	DIE HARD
02	I00002	C00002	AGNESH	M00002	THE DARK KNIGHT
03	I00003	C00002	AGNESH	M00002	THE DARK KNIGHT
04	I00004	C00003	T RAMACHANDRAN	M00003	THE MATRIX
05	I00005	C00003	T RAMACHANDRAN	M00004	INCEPTION
06	I00006	C00003	T RAMACHANDRAN	M00005	OFFICE SPACE
07	I00007	C00004	RAJIB MITRA	M00006	YOUNG FRANKENSTEIN
08	I00008	C00010	RAGHAV SINGH	M00008	CASABLANCA
09	I00009	C00011	RAJ SEKHANRAN	M00010	GONE WITH THE WIND
10	I00010	C00004	RAJIB MITRA	M00007	SHAUN OF THE DEAD

11	I00011	C00004	RAJIB MITRA	M00007	SHAUN OF THE DEAD
12	I00012	C00001	NITIN	M00001	DIE HARD
13	I00013	C00003	T RAMACHANDRAN	M00001	DIE HARD
14	I00014	C00003	T RAMACHANDRAN	M00010	GONE WITH THE WIND
15	I00015	C00003	T RAMACHANDRAN	M00011	TITANIC
16	I00016	C00003	T RAMACHANDRAN	M00011	TITANIC
17	I00017	C00003	T RAMACHANDRAN	M00008	CASABLANCA
18	I00018	C00002	AGNESH	M00010	GONE WITH THE WIND
19	I00019	C00004	RAJIB MITRA	M00001	DIE HARD

11.Please follow instructions given below.

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 decending order based on issue date of the video.

7 rows

```
select cid.issue_id,cid.issue_date,cid.customer_id,cm.customer_name,cm.contact_no
from customer_issue_details cid join customer_master cm on cid.customer_id=cm.customer_id
where year(issue_date)=2013 group by issue_id,issue_date,customer_id order by
issue_date desc;
```

ISSUE_ID	ISSUE_DATE	CUSTOMER_ID	CUSTOMER_NAME	CONTACT_NO
I00012	2013-11-28	C00001	NITIN	9830354218
I00017	2013-04-15	C00003	T RAMACHANDRAN	9831289761
I00009	2013-03-16	C00011	RAJ SEKHANRAN	8423178906
I00016	2013-03-05	C00003	T RAMACHANDRAN	9831289761
I00008	2013-03-02	C00010	RAGHAV SINGH	9675167890
I00015	2013-02-03	C00003	T RAMACHANDRAN	9831289761
I00014	2013-01-02	C00003	T RAMACHANDRAN	9831289761

12.Please follow instructions given below.

Write a query to display movie id ,movie name and actor names of movies which are not issued to any customers.
 Actors Name to be displayed in the below format.LEAD_ACTOR_ONE space ambersant space LEAD_ACTOR_TWO.

Example: Assume lead actor one's name is "Jack Tomson" and Lead actor two's name is "Maria" then Actors name will be "Jack Tomsom & Maria"Hint:Use ACTORS as alias name for actors name.
 Display the records in ascending order based on movie name.

1 row

```
select movie_id,movie_name,concat(lead_actor_name1,' & ',lead_actor_name2) as ACTORS
from movies_master where movie_id
not in (select movie_id from customer_issue_details) order by
movie_name;
```

MOVIE_ID	MOVIE_NAME	ACTORS
M00009	THE NOTEBOOK	RYAN GOSLING & RACHEL

		MCADAMS
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13. Please follow instructions given below.

Write a query to display the director's name, movie name and lead_actor_name1 of all the movies directed by the director who directed more than one movie. Display the directors 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 and then by movie_name in descending order.

2 rows

SELECT upper(director_name) DIRECTOR_NAME, movie_name, lead_actor_name1 FROM movies_master WHERE director_name in (SELECT director_name FROM movies_master GROUP BY director_name HAVING count(movie_id)>1) order by director_name, movie_name desc;

DIRECTOR_NAME	MOVIE_NAME	LEAD_ACTOR_NAME1
CHRISTOPHER NOLAN	THE DARK KNIGHT	CHRISTIAN BALE
CHRISTOPHER NOLAN	INCEPTION	LEONARDO DICAPRIO

14. Please follow instructions given below.

Write a query to display number of customers who have registered in the library in the year 2012 and who have given/provided contact number.
 Hint: Use NO_OF_CUSTOMERS as alias name for number of customers.

1 row

select count(customer_id) as NO_OF_CUSTOMERS from customer_master where year(date_of_registration)

=2012 and contact_no != 'NULL'

NO_OF_CUSTOMERS
6

15. Please follow instructions given below.

Write a query to display the customer's name, contact number, library card id and library card description of all the customers irrespective of customers holding a library card. If customer contact number is not available then display his address. Display the records sorted in ascending order based on customer name. Hint: Use CONTACT_DETAILS as alias name for customer contact.

11 rows

```
select cm.customer_name,ifnull(cm.contact_no,cm.contact_add) as  
CONTACT_DETAILS,lcd.card_id,lcd.description from customer_master cm  
  
left join customer_card_details ccd on cm.customer_id=ccd.customer_id  
  
left join library_card_master lcd on ccd.card_id=lcd.card_id group by  
customer_name,description,CONTACT_DETAILS  
  
order by customer_name;
```

CUSTOMER_NAME	CONTACT_DETAILS	CARD_ID	DESCRIPTION
AGNESH	8923156781	CRD002	GOLD CARD
AJAY GHOSH	8763478901	NULL	NULL
GEETHA REDDY	8976167890	NULL	NULL
NITIN	9830354218	CRD001	SILVER CARD
RAGHAV SINGH	9675167890	NULL	NULL
RAJ SEKHANRAN	8423178906	NULL	NULL
RAJAN PILLAI	A 1/66 KODAMBAKKAM	NULL	NULL
RAJIB MITRA	9830356781	CRD003	PLATINUM CARD
RIA NATRAJAN	9856723190	NULL	NULL
SHIV PRASAD	2/2 PHASE II, JAWAHAR NAGAR	CRD003	PLATINUM CARD

T RAMACHANDRAN	9831289761	CRD002	GOLD CARD
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16.Please follow instructions given below.

Write a query to display the customer id, customer name and number of times the same movie is issued to the same customers who have taken same movie more than once. Display the records sorted by customer name in decending order For Example: Assume customer John has taken Titanic three times and customer Ram has taken Die hard only once then display the details of john. Hint: Use NO_OF_TIMES as alias name for number of times

4 rows

select cm.customer_id,cm.customer_name,count(cid.movie_id) as NO_OF_TIMES from customer_master

cm join customer_issue_details cid on cm.customer_id=cid.customer_id group by customer_id,movie_id having

count(movie_id)>1 order by customer_name desc;

CUSTOMER_ID	CUSTOMER_NAME	NO_OF_TIMES
C00003	T RAMACHANDRAN	2
C00004	RAJIB MITRA	2
C00001	NITIN	2
C00002	AGNESH	2

17.Please follow instructions given below.

Write a query to display customer id, customer name,contact number, movie category and number of movies issued to each customer based on movie category who has been issued with more than one movie in that category. Example: Display contact number as "+91-876-456-2345" format.

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

Hint:Use CONTACT_ISD as alias name for contact number.

Display the records sorted in ascending order based on customer name and then by movie category.

5 rows

```
select cid.customer_id,cm.customer_name,  
concat('+91-',substring(cm.contact_no,1,3),'-',substring(cm.contact_no,4,3),'-',  
substring(cm.contact_no,7,4)) as CONTACT_ISD,  
mm.movie_category,count(mm.movie_category) as NO_OF_MOVIES from customer_master  
cm join customer_issue_details cid  
on cm.customer_id=cid.customer_id join movies_master mm on cid.movie_id=mm.movie_id  
group by mm.movie_category,cm.customer_name having count(movie_category)>1  
order by cm.customer_name,mm.movie_category;
```

CUSTOMER_ID	CUSTOMER_NAME	CONTACT_ISD	MOVIE_CATEGORY	NO_OF_MOVIES
C00002	AGNESH	+91-892-315-678 1	ACTION	2
C00001	NITIN	+91-983-035-421 8	ACTION	2
C00004	RAJIB MITRA	+91-983-035-678 1	COMEDY	3
C00003	T RAMACHANDRAN	+91-983-128-976 1	ACTION	3
C00003	T RAMACHANDRAN	+91-983-128-976 1	ROMANCE	4

18.Please follow instructions given below.

Write a query to display customer id and customer name of customers who has been issued with

maximum number of movies and customer who has been issued with minimum no of movies.

For example Assume customer John has been issued 5 movies, Ram has been issued 10 movies and Kumar has been issued 2 movies. The name and id of Ram should be displayed for issuing maximum movies and Kumar should be displayed for issuing minimum movies. Consider only the customers who have been issued with atleast 1 movie Customer(s) who has/have been issued the maximum number of movies must be displayed first followed by the customer(s) who has/have been issued with the minimum number of movies. In case of multiple customers who have been displayed with the maximum or minimum number of movies, display the records sorted in ascending order based on customer name.

3 rows

```
(select cm.customer_id,cm.customer_name from customer_master cm
join customer_issue_details cid
on cm.customer_id=cid.customer_id group by cm.customer_id
having count(cid.issue_id) >= all (select count(cid.issue_id) from customer_master cm
join customer_issue_details cid
on cm.customer_id=cid.customer_id group by cm.customer_id) order by cm.customer_name)
union all
(select cm.customer_id,cm.customer_name from customer_master cm
join customer_issue_details cid
on cm.customer_id=cid.customer_id group by cm.customer_id
having count(cid.issue_id) <= all (select count(cid.issue_id) from customer_master cm
join customer_issue_details cid
on cm.customer_id=cid.customer_id group by cm.customer_id) order by cm.customer_name)
```

CUSTOMER_ID	CUSTOMER_NAME
C00003	T RAMACHANDRAN
C00010	RAGHAV SINGH
C00011	RAJ SEKHANRAN

19. Please follow instructions given below.

Write a query to display the customer id, customer name and number of times movies have been issued from Comedy category. Display only for customers who have taken more than once.

Hint: Use NO_OF_TIMES as alias name

Display the records in ascending order based on customer name.

1 row

```
select cm.customer_id, cm.customer_name, count(mm.movie_id) as NO_OF_TIMES from  
customer_master cm
```

```
join customer_issue_details cid on cm.customer_id=cid.customer_id join
```

```
movies_master mm on cid.movie_id=mm.movie_id where mm.movie_category='comedy' group by  
customer_id
```

```
order by customer_name>1;
```

CUSTOMER_ID	CUSTOMER_NAME	NO_OF_TIMES
C00004	RAJIB MITRA	3

20. Please follow instructions given below.

Write a query to display customer id and total rent paid by the customers who are issued with the videos. Need not display the customers who have not taken / issued with any videos. Hint: Alias Name for total rent paid is TOTAL_COST. Display the records sorted in ascending order based on customer id

6 rows

```
select cid.customer_id, sum(mm.rental_cost) as TOTAL_COST from customer_issue_details cid
```

```
join movies_master mm
```

```
on cid.movie_id=mm.movie_id group by customer_id order by customer_id;
```


	customer_id	TOTAL_COST
▶	C00001	200
	C00002	300
	C00003	1700
	C00004	400
	C00010	1000
	C00011	100