```
------------------DDL--------------------------

CREATE DATABASE mt_db;
USE mt_db;



Create table CUSTOMER_MASTER
(
        CUSTOMER_ID Varchar(10),
        CUSTOMER_NAME Varchar(30) NOT NULL,
        CONTACT_NO BIGINT(10),
        CONTACT_ADD Varchar(20),
        DATE_OF_REGISTRATION Date NOT NULL,
        AGE Varchar(15)NOT NULL,
        Constraint MT_cts1 PRIMARY KEY(CUSTOMER_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 MOVIES_MASTER
(
        MOVIE_ID Varchar(10),
        MOVIE_NAME Varchar(50) NOT NULL,
        RELEASE_DATE Varchar(30) NOT NULL,
        LANGUAGE Varchar(30),
        RATING int(2),
        DURATION VARCHAR(10) NOT NULL,
        MOVIE_TYPE Varchar(3),
        MOVIE_CATEGORY VARCHAR(20) NOT NULL,
        DIRECTOR VARCHAR(20) NOT NULL,
        LEAD_ROLE_1 Varchar(3) NOT NULL,
        LEAD_ROLE_2 VARCHAR(4) NOT NULL,
        RENT_COST BIGINT(10),
        Constraint MT_cts4 PRIMARY KEY(MOVIE_ID)
);

Create table CUSTOMER_CARD_DETAILS
(
        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)
);
```

```sql
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)

);




------------------DML---------------------------


Insert into CUSTOMER_MASTER Values('CUS001', 'AMIT',
9876543210,'ADD1', '2012-02-12', '21');
Insert into CUSTOMER_MASTER Values('CUS002', 'ABDHUL',
8765432109,'ADD2', '2012-02-12', '21');
Insert into CUSTOMER_MASTER Values('CUS003', 'GAYAN',
7654321098,'ADD3', '2012-02-12', '21');
Insert into CUSTOMER_MASTER Values('CUS004', 'RADHA',
6543210987,'ADD4', '2012-02-12', '21');
Insert into CUSTOMER_MASTER Values('CUS005', 'GURU', NULL,'ADD5',
'2012-02-12', '21');
Insert into CUSTOMER_MASTER Values('CUS006', 'MOHAN',
4321098765,'ADD6', '2012-02-12', '21');
Insert into CUSTOMER_MASTER Values('CUS007', 'NAME7',
3210987654,'ADD7', '2012-02-12', '21');
Insert into CUSTOMER_MASTER Values('CUS008', 'NAME8',
2109876543,'ADD8', '2013-02-12', '21');
Insert into CUSTOMER_MASTER Values('CUS009', 'NAME9', NULL,'ADD9',
'2013-02-12', '21');
Insert into CUSTOMER_MASTER Values('CUS010', 'NAM10',
9934567890,'ADD10', '2013-02-12', '21');
Insert into CUSTOMER_MASTER Values('CUS011', 'NAM11',
9875678910,'ADD11', '2013-02-12', '21');

Insert into LIBRARY_CARD_MASTER Values('CR001', 'Silver', 200, 5);
Insert into LIBRARY_CARD_MASTER Values('CR002', 'Gold', 400, 9);
Insert into LIBRARY_CARD_MASTER Values('CR003', 'Platinum', 600, 8);
Insert into LIBRARY_CARD_MASTER Values('CR004', 'VISA', 800, 7);
Insert into LIBRARY_CARD_MASTER Values('CR005', 'CREDIT', 1200, 6);

Insert into MOVIES_MASTER Values('MV001', 'DIEHARD', '2012-05-
13','ENGLISH', 4 , '2HRS', 'U/A','ACTION','DIR1','L1','L2',100);
Insert into MOVIES_MASTER Values('MV002', 'THE MATRIX', '2012-05-
13','ENGLISH', 4 , '2HRS', 'A','ACTION','DIR2','L1','L2',100);
Insert into MOVIES_MASTER Values('MV003', 'INCEPTION', '2012-05-
13','ENGLISH', 4 , '2HRS', 'U/A','ACTION','DIR3','L15','L2',100);
```

```sql
Insert into MOVIES_MASTER Values('MV004', 'DARK KNIGHT', '2012-05-
13','ENGLISH', 4 , '2HRS', 'A','ACTION','DIR4','L15','L2',100);
Insert into MOVIES_MASTER Values('MV005', 'OFFICE S', '2012-05-
13','ENGLISH', 4 , '2HRS', 'U/A','COMEDY','DIR5','L12','L24',100);
Insert into MOVIES_MASTER Values('MV006', 'SHAWN OF DEAD', '2012-05-
13','ENGLISH', 4 , '2HRS', 'U/A','COMEDY','DIR6','L1','L25',100);
Insert into MOVIES_MASTER Values('MV007', 'YOUNG FRANKEN', '2012-05-
13','ENGLISH', 4 , '2HRS', 'U/A','COMEDY','DIR7','L1','L2',100);
Insert into MOVIES_MASTER Values('MV008', 'CAS', '2012-05-
13','ENGLISH', 4 , '2HRS', 'A','ROMANCE','DIR8','L1','L2',100);
Insert into MOVIES_MASTER Values('MV009', 'GWW', '2012-05-
13','ENGLISH', 4 , '2HRS', 'A','ROMANCE','DIR9','L1','L2',100);
Insert into MOVIES_MASTER Values('MV010', 'TITANIC', '2012-05-
13','ENGLISH', 4 , '2HRS', 'A','ROMANCE','DIR10','L1','L2',100);
Insert into MOVIES_MASTER Values('MV011', 'THE NOTE BOOK', '2012-05-
13','ENGLISH', 4 , '2HRS', 'A','ROMANCE','DIR11','L1','L2',100);


Insert into CUSTOMER_CARD_DETAILS Values('CUS001', 'CR001', '2012-05-
13');
Insert into CUSTOMER_CARD_DETAILS Values('CUS002', 'CR002', '2012-05-
13');
Insert into CUSTOMER_CARD_DETAILS Values('CUS003', 'CR002', '2013-05-
13');
Insert into CUSTOMER_CARD_DETAILS Values('CUS004', 'CR003', '2013-05-
13');
Insert into CUSTOMER_CARD_DETAILS Values('CUS005', 'CR003', '2012-05-
13');

Insert into CUSTOMER_ISSUE_DETAILS Values ('IS001', 'CUS001', 'MV001',
'2012-05-13', '2012-05-13','2012-05-13');
Insert into CUSTOMER_ISSUE_DETAILS Values ('IS002', 'CUS001', 'MV001',
'2012-05-01', '2012-05-16','2012-05-16');
Insert into CUSTOMER_ISSUE_DETAILS Values ('IS003', 'CUS002', 'MV004',
'2012-05-02', '2012-05-06','2012-05-16');
Insert into CUSTOMER_ISSUE_DETAILS Values ('IS004', 'CUS002', 'MV004',
'2012-04-03', '2012-04-16','2012-04-20');
Insert into CUSTOMER_ISSUE_DETAILS Values ('IS005', 'CUS002', 'MV009',
'2012-04-04', '2012-04-16','2012-04-20');
Insert into CUSTOMER_ISSUE_DETAILS Values ('IS006', 'CUS003', 'MV002',
'2012-03-30', '2012-04-15','2012-04-20');
Insert into CUSTOMER_ISSUE_DETAILS Values ('IS007', 'CUS003', 'MV003',
'2012-04-20', '2012-05-05','2012-05-05');
Insert into CUSTOMER_ISSUE_DETAILS Values ('IS008', 'CUS003', 'MV005',
'2012-04-21', '2012-05-07','2012-05-25');
Insert into CUSTOMER_ISSUE_DETAILS Values ('IS009', 'CUS003', 'MV001',
'2012-04-22', '2012-05-07','2012-05-25');
Insert into CUSTOMER_ISSUE_DETAILS Values ('IS010', 'CUS003', 'MV009',
'2012-04-22', '2012-05-07','2012-05-25');
Insert into CUSTOMER_ISSUE_DETAILS Values ('IS011', 'CUS003', 'MV010',
'2012-04-23', '2012-05-07','2012-05-25');
Insert into CUSTOMER_ISSUE_DETAILS Values ('IS012', 'CUS003', 'MV010',
'2012-04-24', '2012-05-07','2012-05-25');
Insert into CUSTOMER_ISSUE_DETAILS Values ('IS013', 'CUS003', 'MV008',
'2012-04-25', '2012-05-07','2012-05-25');
Insert into CUSTOMER_ISSUE_DETAILS Values ('IS014', 'CUS004', 'MV007',
'2012-04-26', '2012-05-07','2012-05-25');
```

```
Insert into CUSTOMER_ISSUE_DETAILS Values ('IS015', 'CUS004', 'MV006',
'2012-04-27', '2012-05-07','2012-05-25');
Insert into CUSTOMER_ISSUE_DETAILS Values ('IS016', 'CUS004', 'MV006',
'2012-04-28', '2012-05-07','2012-05-25');
Insert into CUSTOMER_ISSUE_DETAILS Values ('IS017', 'CUS004', 'MV001',
'2012-04-29', '2012-05-07','2012-05-25');
Insert into CUSTOMER_ISSUE_DETAILS Values ('IS018', 'CUS010', 'MV008',
'2012-04-24', '2012-05-07','2012-05-25');
Insert into CUSTOMER_ISSUE_DETAILS Values ('IS019', 'CUS011', 'MV009',
'2012-04-27', '2012-05-07','2012-05-25');
```

```
------------------LAYOUT---------------------------

mysql> show tables;
+----------------------+
| Tables_in_mms        |
+----------------------+
| customer_card_details |
| customer_issue_details |
| customer_master      |
| library_card_master  |
| movies_master        |
+----------------------+
5 rows in set (0.01 sec)
```

_____
_____

```
mysql> desc movies_master;
+----------------+-------------+------+-----+---------+-------+
| Field          | Type        | Null | Key | Default | Extra |
+----------------+-------------+------+-----+---------+-------+
| MOVIE_ID       | varchar(10) | NO   | PRI |         |       |
| MOVIE_NAME     | varchar(50) | NO   |     | NULL    |       |
| RELEASE_DATE   | varchar(30) | NO   |     | NULL    |       |
| LANGUAGE       | varchar(30) | YES  |     | NULL    |       |
| RATING         | int(2)      | YES  |     | NULL    |       |
| DURATION       | varchar(10) | NO   |     | NULL    |       |
| MOVIE_TYPE     | varchar(3)  | YES  |     | NULL    |       |
| MOVIE_CATEGORY | varchar(20) | NO   |     | NULL    |       |
| DIRECTOR       | varchar(20) | NO   |     | NULL    |       |
| LEAD_ROLE_1    | varchar(3)  | NO   |     | NULL    |       |
| LEAD_ROLE_2    | varchar(4)  | NO   |     | NULL    |       |
| RENT_COST      | bigint(10)  | YES  |     | NULL    |       |
+----------------+-------------+------+-----+---------+-------+
12 rows in set (0.05 sec)
```

```
mysql> SELECT * FROM movies_master;
+----------+-------------+--------------+----------+--------+-------
---+------------+----------------+----------+-------------+----------
--+-----------+
| MOVIE_ID | MOVIE_NAME  | RELEASE_DATE | LANGUAGE | RATING |
DURATION | MOVIE_TYPE | MOVIE_CATEGORY | DIRECTOR | LEAD_ROLE_1 |
```

```
LEAD_ROLE_2 | RENT_COST |
+----------+--------------+------------+----------+-------+------
---+----------+--------------+----------+------------+----------
--+----------+
| MV001    | DIEHARD      | 2012-05-13 | ENGLISH  |     4 | 2HRS
| U/A      | ACTION       | DIR1       | L1       | L2         |
100 |
| MV002    | THE MATRIX   | 2012-05-13 | ENGLISH  |     4 | 2HRS
| A        | ACTION       | DIR2       | L1       | L2         |
100 |
| MV003    | INCEPTION    | 2012-05-13 | ENGLISH  |     4 | 2HRS
| U/A      | ACTION       | DIR3       | L15      | L2         |
100 |
| MV004    | DARK KNIGHT  | 2012-05-13 | ENGLISH  |     4 | 2HRS
| A        | ACTION       | DIR4       | L15      | L2         |
100 |
| MV005    | OFFICE S     | 2012-05-13 | ENGLISH  |     4 | 2HRS
| U/A      | COMEDY       | DIR5       | L12      | L24        |
100 |
| MV006    | SHAWN OF DEAD | 2012-05-13 | ENGLISH |     4 | 2HRS
| U/A      | COMEDY       | DIR6       | L1       | L25        |
100 |
| MV007    | YOUNG FRANKEN | 2012-05-13 | ENGLISH |     4 | 2HRS
| U/A      | COMEDY       | DIR7       | L1       | L2         |
100 |
| MV008    | CAS          | 2012-05-13 | ENGLISH  |     4 | 2HRS
| A        | ROMANCE      | DIR8       | L1       | L2         |
100 |
| MV009    | GWW          | 2012-05-13 | ENGLISH  |     4 | 2HRS
| A        | ROMANCE      | DIR9       | L1       | L2         |
100 |
| MV010    | TITANIC      | 2012-05-13 | ENGLISH  |     4 | 2HRS
| A        | ROMANCE      | DIR10      | L1       | L2         |
100 |
| MV011    | THE NOTE BOOK | 2012-05-13 | ENGLISH |     4 | 2HRS
| A        | ROMANCE      | DIR11      | L1       | L2         |
100 |
+----------+--------------+------------+----------+-------+------
---+----------+--------------+----------+------------+----------
--+----------+
11 rows in set (0.00 sec)
```

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_____

```
mysql> desc customer_master;
+---------------------+-------------+------+-----+---------+-------+
| Field               | Type        | Null | Key | Default | Extra |
+---------------------+-------------+------+-----+---------+-------+
| CUSTOMER_ID         | varchar(10) | NO   | PRI |         |       |
| CUSTOMER_NAME       | varchar(30) | NO   |     | NULL    |       |
| CONTACT_NO          | bigint(10)  | YES  |     | NULL    |       |
| CONTACT_ADD         | varchar(20) | YES  |     | NULL    |       |
| DATE_OF_REGISTRATION | date       | NO   |     | NULL    |       |
| AGE                 | varchar(15) | NO   |     | NULL    |       |
+---------------------+-------------+------+-----+---------+-------+
```

6 rows in set (0.01 sec)


```
mysql> SELECT * FROM customer_master;
+-------------+---------------+------------+-------------+----------------------+-----+
| CUSTOMER_ID | CUSTOMER_NAME | CONTACT_NO | CONTACT_ADD | DATE_OF_REGISTRATION | AGE |
+-------------+---------------+------------+-------------+----------------------+-----+
| CUS001      | AMIT          | 9876543210 | ADD1        | 2012-02-12           | 21  |
| CUS002      | ABDHUL        | 8765432109 | ADD2        | 2012-02-12           | 21  |
| CUS003      | GAYAN         | 7654321098 | ADD3        | 2012-02-12           | 21  |
| CUS004      | RADHA         | 6543210987 | ADD4        | 2012-02-12           | 21  |
| CUS005      | GURU          |       NULL | ADD5        | 2012-02-12           | 21  |
| CUS006      | MOHAN         | 4321098765 | ADD6        | 2012-02-12           | 21  |
| CUS007      | NAME7         | 3210987654 | ADD7        | 2012-02-12           | 21  |
| CUS008      | NAME8         | 2109876543 | ADD8        | 2013-02-12           | 21  |
| CUS009      | NAME9         |       NULL | ADD9        | 2013-02-12           | 21  |
| CUS010      | NAM10         | 9934567890 | ADD10       | 2013-02-12           | 21  |
| CUS011      | NAM11         | 9875678910 | ADD11       | 2013-02-12           | 21  |
+-------------+---------------+------------+-------------+----------------------+-----+
11 rows in set (0.00 sec)
```

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```
mysql> desc library_card_master;
+-----------------+-------------+------+-----+---------+-------+
| Field           | Type        | Null | Key | Default | Extra |
+-----------------+-------------+------+-----+---------+-------+
| CARD_ID         | varchar(10) | NO   | PRI |         |       |
| DESCRIPTION     | varchar(30) | NO   |     | NULL    |       |
| AMOUNT          | bigint(50)  | YES  |     | NULL    |       |
| NUMBER_OF_YEARS | bigint(10)  | NO   |     | NULL    |       |
+-----------------+-------------+------+-----+---------+-------+
4 rows in set (0.01 sec)
```

```
mysql> select * from  library_card_master;
+---------+-------------+--------+-----------------+
| CARD_ID | DESCRIPTION | AMOUNT | NUMBER_OF_YEARS |
```

```
+---------+------------+--------+----------------+
| CR001   | Silver     |    200 |              5 |
| CR002   | Gold       |    400 |              9 |
| CR003   | Platinum   |    600 |              8 |
| CR004   | VISA       |    800 |              7 |
| CR005   | CREDIT     |   1200 |              6 |
+---------+------------+--------+----------------+
5 rows in set (0.00 sec)
```

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```
mysql> desc customer_card_details;
+-------------+-------------+------+-----+---------+-------+
| Field       | Type        | Null | Key | Default | Extra |
+-------------+-------------+------+-----+---------+-------+
| CUSTOMER_ID | varchar(10) | NO   | PRI |         |       |
| CARD_ID     | varchar(10) | YES  | MUL | NULL    |       |
| ISSUE_DATE  | date        | NO   |     | NULL    |       |
+-------------+-------------+------+-----+---------+-------+
3 rows in set (0.02 sec)


mysql> SELECT * FROM customer_card_details;
+-------------+---------+------------+
| CUSTOMER_ID | CARD_ID | ISSUE_DATE |
+-------------+---------+------------+
| CUS001      | CR001   | 2012-05-13 |
| CUS002      | CR002   | 2012-05-13 |
| CUS003      | CR002   | 2013-05-13 |
| CUS004      | CR003   | 2013-05-13 |
| CUS005      | CR003   | 2012-05-13 |
+-------------+---------+------------+
5 rows in set (0.00 sec)
```

_____
_____
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```
mysql> desc customer_issue_details;
+--------------------+-------------+------+-----+---------+-------+
| Field              | Type        | Null | Key | Default | Extra |
+--------------------+-------------+------+-----+---------+-------+
| ISSUE_ID           | varchar(10) | NO   | PRI | NULL    |       |
| CUSTOMER_ID        | varchar(10) | NO   | MUL | NULL    |       |
| MOVIE_ID           | varchar(10) | YES  | MUL | NULL    |       |
| ISSUE_DATE         | date        | NO   |     | NULL    |       |
| RETURN_DATE        | date        | NO   |     | NULL    |       |
| ACTUAL_DATE_RETURN | date        | NO   |     | NULL    |       |
+--------------------+-------------+------+-----+---------+-------+
```

6 rows in set (0.03 sec)

```
mysql> SELECT * FROM customer_issue_details;
+----------+-------------+----------+------------+-------------+--------------------+
| ISSUE_ID | CUSTOMER_ID | MOVIE_ID | ISSUE_DATE | RETURN_DATE | ACTUAL_DATE_RETURN |
+----------+-------------+----------+------------+-------------+--------------------+
| IS001    | CUS001      | MV001    | 2012-05-13 | 2012-05-13  | 2012-05-13         |
| IS002    | CUS001      | MV001    | 2012-05-01 | 2012-05-16  | 2012-05-16         |
| IS003    | CUS002      | MV004    | 2012-05-02 | 2012-05-06  | 2012-05-16         |
| IS004    | CUS002      | MV004    | 2012-04-03 | 2012-04-16  | 2012-04-20         |
| IS005    | CUS002      | MV009    | 2012-04-04 | 2012-04-16  | 2012-04-20         |
| IS006    | CUS003      | MV002    | 2012-03-30 | 2012-04-15  | 2012-04-20         |
| IS007    | CUS003      | MV003    | 2012-04-20 | 2012-05-05  | 2012-05-05         |
| IS008    | CUS003      | MV005    | 2012-04-21 | 2012-05-07  | 2012-05-25         |
| IS009    | CUS003      | MV001    | 2012-04-22 | 2012-05-07  | 2012-05-25         |
| IS010    | CUS003      | MV009    | 2012-04-22 | 2012-05-07  | 2012-05-25         |
| IS011    | CUS003      | MV010    | 2012-04-23 | 2012-05-07  | 2012-05-25         |
| IS012    | CUS003      | MV010    | 2012-04-24 | 2012-05-07  | 2012-05-25         |
| IS013    | CUS003      | MV008    | 2012-04-25 | 2012-05-07  | 2012-05-25         |
| IS014    | CUS004      | MV007    | 2012-04-26 | 2012-05-07  | 2012-05-25         |
| IS015    | CUS004      | MV006    | 2012-04-27 | 2012-05-07  | 2012-05-25         |
| IS016    | CUS004      | MV006    | 2012-04-28 | 2012-05-07  | 2012-05-25         |
| IS017    | CUS004      | MV001    | 2012-04-29 | 2012-05-07  | 2012-05-25         |
| IS018    | CUS010      | MV008    | 2012-04-24 | 2012-05-07  | 2012-05-25         |
| IS019    | CUS011      | MV009    | 2012-04-27 | 2012-05-07  | 2012-05-25         |
+----------+-------------+----------+------------+-------------+--------------------+
19 rows in set (0.00 sec)
```

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Problem#1

display customer name,customer id who have issued max and min no.of movies

Problem #2
display id,name,mobile num and description of all customers.if mobile num is not available then display address as alias contact,for those who does't have library cards display null as description

Problem #3
display customer details and movie id for those who issued same movie more than one time OR
//dislay customer details who watched same movie more than once

Problem #4
display customer information those who has library cards

Problem #5

display the members who watch the movie but doesnt have card

Prblem #6
display sr no as 2 digits of issue id,emp id,movie watched,video id and sort by sr no

Problem #7
display total revenue spent on videos by each customer