

SQL QUERIES FOR VIDEO LIBRARY SCENARIO

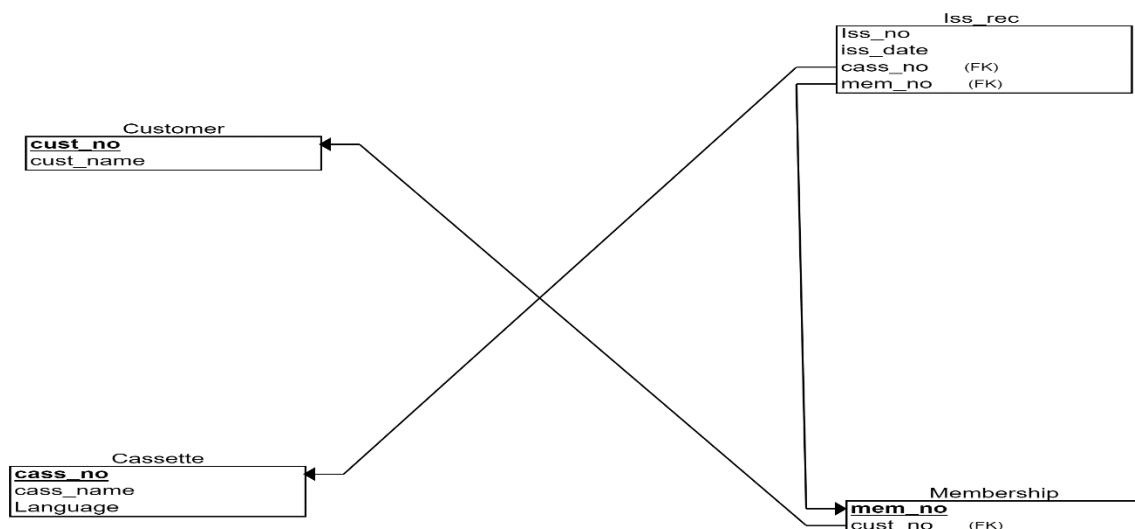
AIM:

To execute the sql queries for video library scenario

Customer(**cust_no**: integer, cust_name: string)
Membership(**Mem_no**: integer, cust_no: integer)
Cassette(**cass_no**: integer, cass_name: string, Language: String)
Iss_rec(**iss_no**: integer, iss_date: date, mem_no: integer, cass_no: integer)
For the above schema, perform the following:-
a) Neatly sketch schema diagram and identify join relationship among tables.
b) Create the tables with the appropriate integrity constraints
c) Insert around 10 records in each of the tables
d) List all the customer names with their membership numbers
e) List all the issues for the current date with the customer names and cassette names
f) List the details of the customer who has borrowed the cassette whose title is "The Legend"
g) Give a count of how many cassettes have been borrowed by each customer
h) Give a list of book which has been taken by the student with mem_no as 5

i) List the cassettes issues for today
j) Create a view which lists out the iss_no, iss_date, cust_name, cass_name
k) Create a view which lists issues-date wise for the last one week

a)



b)

```
1 CREATE TABLE Customer (
2     cust_no INTEGER PRIMARY KEY,
3     cust_name VARCHAR(50)
4 );
5
6 CREATE TABLE Membership (
7     mem_no INTEGER PRIMARY KEY,
8     cust_no INTEGER REFERENCES Customer(cust_no)
9 );
10
11 CREATE TABLE Cassette (
12     cass_no INTEGER PRIMARY KEY,
13     cass_name VARCHAR(100),
14     languages VARCHAR(50)
15 );
16
17 CREATE TABLE Iss_rec (
18     iss_no INTEGER PRIMARY KEY,
19     iss_date DATE,
20     mem_no INTEGER REFERENCES Membership(mem_no),
21     cass_no INTEGER REFERENCES Cassette(cass_no)
22 );
23
```

Results Explain Describe Saved SQL History

Table created.

c)

```
24 INSERT INTO Customer VALUES(1, 'John Doe'); INSERT INTO Customer VALUES(2, 'Jane Smith');
25 INSERT INTO Customer VALUES(3, 'Alice Johnson'); INSERT INTO Customer VALUES(4, 'Bob Williams');
26 INSERT INTO Customer VALUES(5, 'Emily Davis'); INSERT INTO Customer VALUES(6, 'Michael Brown');
27 INSERT INTO Customer VALUES(7, 'Sophia Miller'); INSERT INTO Customer VALUES(8, 'William Wilson');
28 INSERT INTO Customer VALUES(9, 'Olivia Taylor'); INSERT INTO Customer VALUES(10, 'James Anderson');
29
30 INSERT INTO Membership VALUES(1, 1); INSERT INTO Membership VALUES(2, 2);
31 INSERT INTO Membership VALUES(3, 3); INSERT INTO Membership VALUES(4, 4);
32 INSERT INTO Membership VALUES(5, 5); INSERT INTO Membership VALUES(6, 6);
33 INSERT INTO Membership VALUES(7, 7); INSERT INTO Membership VALUES(8, 8);
34 INSERT INTO Membership VALUES(9, 9); INSERT INTO Membership VALUES(10, 10);
35
36
37 INSERT INTO Cassette VALUES(1, 'The Legend', 'English');
38 INSERT INTO Cassette VALUES(2, 'Fantastic Voyage', 'French');
39 INSERT INTO Cassette VALUES(3, 'Gone with the Wind', 'English');
40 INSERT INTO Cassette VALUES(4, 'La La Land', 'Spanish');
41 INSERT INTO Cassette VALUES(5, 'Inception', 'English');
42 INSERT INTO Cassette VALUES(6, 'The Matrix', 'English');
43 INSERT INTO Cassette VALUES(7, 'The Godfather', 'Italian');
44 INSERT INTO Cassette VALUES(8, 'Pulp Fiction', 'English');
45 INSERT INTO Cassette VALUES(9, 'Avatar', 'English');
46 INSERT INTO Cassette VALUES(10, 'Casablanca', 'English');
47
48 INSERT INTO Iss_rec VALUES(1, '04-04-2024', 1, 1);
49 INSERT INTO Iss_rec VALUES(2, '04-04-2024', 2, 2);
50 INSERT INTO Iss_rec VALUES(3, '04-04-2024', 3, 3);
51 INSERT INTO Iss_rec VALUES(4, '04-04-2024', 4, 4);
52 INSERT INTO Iss_rec VALUES(5, '04-04-2024', 5, 5);
53 INSERT INTO Iss_rec VALUES(6, '04-04-2024', 6, 6);
54 INSERT INTO Iss_rec VALUES(7, '04-04-2024', 7, 7);
55 INSERT INTO Iss_rec VALUES(8, '04-04-2024', 8, 8);
56 INSERT INTO Iss_rec VALUES(9, '04-04-2024', 9, 9);
57 INSERT INTO Iss_rec VALUES(10, '04-04-2024', 10, 10);
58
```

d)

```
8
9 SELECT c.cust_name, m.mem_no FROM Customer c
0 INNER JOIN Membership m ON c.cust_no = m.cust_no;
1
2
```

Results Explain Describe Saved SQL History

Results Explain Describe Saved SQL History

CUST_NAME	MEM_NO
Bob Williams	4
Sophia Miller	7
James Anderson	10
John Doe	1
Michael Brown	6
Jane Smith	2
Alice Johnson	3
Olivia Taylor	9
Emily Davis	5
William Wilson	8

10 rows returned in 0.02 seconds Download

e)

```
61
62 SELECT c.cust_name, ca.cass_name FROM Customer c INNER JOIN Membership m ON c.cust_no = m.cust_no
63 INNER JOIN Iss_rec i ON m.mem_no = i.mem_no INNER JOIN Cassette ca ON i.cass_no = ca.cass_no
64 WHERE i.iss_date = trunc(sysdate);
65
66
```

Results Explain Describe Saved SQL History

CUST_NAME	CASS_NAME
John Doe	The Legend
Olivia Taylor	Avatar
Jane Smith	Fantastic Voyage
Alice Johnson	Gone with the Wind
Sophia Miller	The Godfather
William Wilson	Pulp Fiction

f)

```
65
66 SELECT c.cust_name, i.iss_date FROM Customer c INNER JOIN Membership m ON c.cust_no = m.cust_no
67 INNER JOIN Iss_rec i ON m.mem_no = i.mem_no INNER JOIN Cassette ca ON i.cass_no = ca.cass_no
68 WHERE ca.cass_name = 'The Legend';
69
70
```

Results Explain Describe Saved SQL History

CUST_NAME	ISS_DATE
John Doe	04/04/2024

1 rows returned in 0.01 seconds Download

g)

```
69
70 SELECT c.cust_name, COUNT(*) AS num_borrowed FROM Customer c INNER JOIN Membership m ON c.cust_no = m.cust_no
71 INNER JOIN Iss_rec i ON m.mem_no = i.mem_no GROUP BY c.cust_name;
72 |
```

CUST_NAME	NUM_BORROWED
Alice Johnson	1
Emily Davis	1
Jane Smith	1
William Wilson	1
Bob Williams	1
Sophia Miller	1
John Doe	1
Michael Brown	1
Olivia Taylor	1
James Anderson	1

10 rows returned in 0.05 seconds [Download](#)

h)

```
74
73
74 SELECT ca.cass_name FROM Cassette ca INNER JOIN Iss_rec i ON ca.cass_no = i.cass_no
75 WHERE i.mem_no = 5;
```

CASS_NAME
Inception

1 rows returned in 0.03 seconds [Download](#)

i)

```
77
78 select ca.cass_name from Cassette ca ,Iss_rec i,Membership m ,Customer c where i.cass_no=ca.cass_no and i.mem_no=m.mem_no
79 and c.cust_no=m.cust_no and i.iss_date=trunc(sysdate);
80
```

CASS_NAME
La La Land
The Godfather
Casablanca
The Legend
The Matrix
Fantastic Voyage
Gone with the Wind
Avatar
Inception
Pulp Fiction

10 rows returned in 0.01 seconds [Download](#)

j)

```
80
81 CREATE VIEW Iss_Details AS SELECT i.iss_no, i.iss_date, c.cust_name, ca.cass_name
82 FROM Iss_rec i INNER JOIN Membership m ON i.mem_no = m.Mem_no INNER JOIN Customer c ON m.cust_no = c.cust_no
83 INNER JOIN Cassette ca ON i.cass_no = ca.cass_no;
84
85
```

Results	Explain	Describe	Saved SQL	History
View created.				
0.04seconds				

k)

```
86
87
88 CREATE VIEW Iss_view AS SELECT i.iss_no, i.iss_date
89 FROM Iss_rec i INNER JOIN Membership m ON i.mem_no = m.Mem_no INNER JOIN Customer c ON m.cust_no = c.cust_no
90 INNER JOIN Cassette ca ON i.cass_no = ca.cass_no and iss_date between '04-04-2024' and '03-28-2024';
```

Results	Explain	Describe	Saved SQL	History
View created.				
0.04seconds				