**Database Schema for a 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)

1. **CREATE QUERY:**

**Create table for customer17:**

create table customer17(cust\_no number(5)primary key,cust\_name varchar2(20));

**output:**

Table created.

0.08 seconds

**Create table for membership17:**

create table membership17(mem\_no number(5)primary key,cust\_no number(5) references customer17(cust\_no));

**Output:**

Table created.

0.08 seconds

**Create table for cassette17:**

create table cassette17(cass\_no number(5)primary key,cass\_name varchar2(20),language varchar2(10));

**Output:**

Table created.

0.05 seconds

**Create table for iss\_rec17:**

create table iss\_rec17(iss\_no number(5)primary key,iss\_date date,mem\_no number(5)references membership17(mem\_no),cass\_no number(5) references cassette17(cass\_no));

**Output:**

Table created.

0.09 seconds

1. **INSERT QUERY:**

**Insert into customer17:**

insert into customer17 values(1,'raja');

insert into customer17 values(2,'ravi');

insert into customer17 values(3,'pavi');

insert into customer17 values(4,'kavi');

insert into customer17 values(5,'sharmi');

**view records:**

select \* from customer17;

**output:**

**CUST\_NO CUST\_NAME**

**1 raja**

**2 ravi**

**3 pavi**

**4 kavi**

**5 sharmi**

**Insert records into membership17:**

insert into membership17 values(10,1);

insert into membership17 values(11,2);

insert into membership17 values(12,3);

insert into membership17 values(14,3);

insert into membership17 values(15,5);

**view membership17:**

select \* from membership17;

**output:**

MEM\_NO CUST\_NO

11 2

15 5

10 1

12 3

14 3

**insert records into cassette17:**

insert into cassette17 values(1000,'kpop','korean');

insert into cassette17 values(1001,'melody','tamil');

insert into cassette17 values(1002,'rock','english');

insert into cassette17 values(1003,'album','english');

insert into cassette17 values(1004,'karnatic','karnatic');

**view cassette17:**

select \* from cassette17;

**output:**

|  |  |  |
| --- | --- | --- |
| CASS\_NO | CASS\_NAME | LANGUAGE |
| 1000 | kpop | korean |
| 1001 | melody | tamil |
| 1002 | rock | english |
| 1003 | album | english |
| 1004 | karnatic | karnatic |

**Insert records into iss\_rec17:**

insert into iss\_rec17 values(111,'02-21-2019',11,1001);

insert into iss\_rec17 values(112,'03-29-2018',10,1000);

insert into iss\_rec17 values(113,'02-11-2019',12,1002);

insert into iss\_rec17 values(114,'03-05-2019',10,1001);

insert into iss\_rec17 values(115,'03-03-2019',14,1000);

**view iss\_rec17:**

select \* from iss\_rec17;

**output:**

|  |  |  |  |
| --- | --- | --- | --- |
| ISS\_NO | ISS\_DATE | MEM\_NO | CASS\_NO |
| 111 | 02/21/2019 | 11 | 1001 |
| 114 | 03/05/2019 | 10 | 1001 |
| 112 | 03/29/2018 | 10 | 1000 |
| 113 | 02/11/2019 | 12 | 1002 |
| 115 | 03/03/2019 | 14 | 1000 |

1. **List all the customer names with their membership numbers:**

select c.cust\_name,m.mem\_no from customer17 c,membership17 m where c.cust\_no=m.cust\_no;

**output:**

|  |  |
| --- | --- |
| CUST\_NAME | MEM\_NO |
| raja | 10 |
| ravi | 11 |
| pavi | 14 |
| pavi | 12 |
| sharmi | 15 |

1. **List all the issues for the current date with the customer names and cassette names :**

select i.iss\_no,i.iss\_date,ca.cass\_name,c.cust\_name from customer17 c,membership17 m,cassette17 ca,iss\_rec17 i where c.cust\_no=m.cust\_no and m.mem\_no=i.mem\_no and ca.cass\_no=i.cass\_no and i.iss\_date='03-03-2019';

**output:**

|  |  |  |  |
| --- | --- | --- | --- |
| ISS\_NO | ISS\_DATE | CASS\_NAME | CUST\_NAME |
| 115 | 03/03/2019 | kpop | pavi |

1. **List the details of the customer who has borrowed the cassette whose title is ― melody:**

select c.cust\_no,c.cust\_name ,ca.cass\_name from customer17 c,membership17 m,cassette17 ca,iss\_rec17 i where c.cust\_no=m.cust\_no and m.mem\_no=i.mem\_no and ca.cass\_no=i.cass\_no and ca.cass\_name='melody';

**Output:**

|  |  |  |
| --- | --- | --- |
| CUST\_NO | CUST\_NAME | CASS\_NAME |
| 2 | ravi | melody |
| 1 | raja | melody |

1. **Give a count of how many cassettes have been borrowed by each customer:**

select count(cass\_no),mem\_no from iss\_rec17 group by mem\_no;

**output:**

|  |  |
| --- | --- |
| COUNT(CASS\_NO) | MEM\_NO |
| 1 | 11 |
| 1 | 14 |
| 2 | 10 |
| 1 | 12 |

1. **Give a list of book which has been taken by the student with mem\_no as 10:**

select c.cust\_no,m.mem\_no,ca.cass\_name, c.cust\_name from customer17 c,membership17 m,cassette17 ca,iss\_rec17 i where c.cust\_no=m.cust\_no and m.mem\_no=i.mem\_no and ca.cass\_no=i.cass\_no and m.mem\_no=10;

**output:**

|  |  |  |  |
| --- | --- | --- | --- |
| CUST\_NO | CUST\_NO | CUST\_NO | CUST\_NO |
| 1 | 10 | melody | raja |
| 1 | 10 | kpop | raja |

1. **List the cassettes issues for today :**

select ca.cass\_no,ca.cass\_name,i.iss\_no,i.iss\_date,ca.language from cassette17 ca,iss\_rec17 i where ca.cass\_no=i.cass\_no and i.iss\_date='03-03-2019';

**output:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| CASS\_NO | CASS\_NAME | ISS\_NO | ISS\_DATE | LANGUAGE |
| 1000 | kpop | 115 | 03/03/2019 | korean |

1. **Create a view which lists outs the iss\_no, iss\_date, cust\_name, cass\_name:**

create view viewcas17 as(select i.iss\_no,i.iss\_date,c.cust\_name,ca.cass\_name from customer17 c,membership17 m,cassette17 ca,iss\_rec17 i where c.cust\_no=m.cust\_no and m.mem\_no=i.mem\_no and ca.cass\_no=i.cass\_no);

**output;**

View created.

0.05 seconds

**View the table:**

select \* from viewcas17;

**output:**

|  |  |  |  |
| --- | --- | --- | --- |
| ISS\_NO | ISS\_DATE | CUST\_NAME | CASS\_NAME |
| 111 | 02/21/2019 | ravi | melody |
| 114 | 03/05/2019 | raja | melody |
| 112 | 03/29/2018 | raja | kpop |
| 113 | 02/11/2019 | pavi | rock |
| 115 | 03/03/2019 | pavi | kpop |

1. **Create a view which lists issues-date wise for the last one week:**

create view viewiss17 as(select i.iss\_no,i.iss\_date,c.cust\_name from customer17 c,membership17 m,cassette17 ca,iss\_rec17 i where c.cust\_no=m.cust\_no and m.mem\_no=i.mem\_no and ca.cass\_no=i.cass\_no and i.iss\_date between '03-01-2019' and '03-07-2019');

**output:**

View created.

0.04 seconds

**View the table:**

select \* from viewiss17;

**output:**

|  |  |  |
| --- | --- | --- |
| ISS\_NO | ISS\_NO | ISS\_NO |
| 114 | 03/05/2019 | raja |
| 115 | 03/03/2019 | pavi |