Ex.no: 7

Database Schema for a Employee-pay scenario

**employee(emp\_id** : integer, emp\_name: string)

**department(dept\_id:** integer, dept\_name:string)

**paydetails(**emp\_id : integer, dept\_id: integer, basic: integer, deductions: integer, additions: integer, DOJ: date)

**payroll**(emp\_id : integer, pay\_date: date)

1. **Create table query:**

create table emply22(empid number(4) primary key,empname varchar2(10));

**output:**

Table created.

create table depart22(deptid number(4) primary key,deptname varchar2(10));

**output:**

Table created.

create table paydet22(empid number(4) references emply22(empid),deptid number(4) references depart22(deptid));

alter table paydet22 add(basic number(4),deduction number(5), additions number(5), doj date);

**output:**

Table created.

Table altered.

create table payr22(empid number(4) references emply22(empid),paydate date);

**output:**

Table created.

1. **INSERT QUERY:**

insert into emply22 values(1001,'ram');

insert into emply22 values(1002,'jai');

insert into emply22 values(1004,'sita');

insert into emply22 values(1003,'rani');

select \* from emply22;

**output:**

|  |  |
| --- | --- |
| **EMPID** | **EMPNAME** |
| 1001 | ram |
| 1002 | jai |
| 1004 | sita |
| 1003 | rani |

insert into depart22 values(5001,'cse');

insert into depart22 values(5002,'eee');

insert into depart22 values(5003,'mech');

select \* from depart22;

**output:**

|  |  |  |  |
| --- | --- | --- | --- |
| **DEPTID** | | | **DEPTNAME** |
| 5002 | | | eee |
| 5003 | | | mech |
| 5001 | | | cse |
|  |  |  |

insert into paydet22 values(1002,5001,3000,60000,90000,'11-02-2019');

insert into paydet22 values(1003,5002,3500,6500,10000,'02-03-2019');

insert into paydet22 values(1004,5003,5000,6000,11000,'03-02-2019');

select \* from paydet22;

**output:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **EMPID** | **DEPTID** | | **BASIC** | **DEDUCTION** | **ADDITIONS** | **DOJ** |
| 1001 | 5001 | | 2000 | 6000 | 8000 | 11/02/2019 |
| 1002 | 5001 | | 3000 | 60000 | 90000 | 11/02/2019 |
| 1004 | 5003 | | 5000 | 6000 | 11000 | 03/02/2019 |
| 1003 | 5002 | | 3500 | 6500 | 10000 | 02/03/2019 |
|  |  |  |

insert into payr22 values(1001,'02-03-2019');

insert into payr22 values(1002,'02-03-2019');

insert into payr22 values(1001,'03-03-2019');

insert into payr22 values(1003,'02-03-2019');

insert into payr22 values(1004,'04-03-2019'); select \* from payr22;

**output:**

|  |  |  |  |
| --- | --- | --- | --- |
| **EMPID** | | | **PAYDATE** |
| 1001 | | | 02/03/2019 |
| 1001 | | | 03/03/2019 |
| 1003 | | | 02/03/2019 |
| 1004 | | | 04/03/2019 |
| 1002 | | | 02/03/2019 |
|  |  |  |

1. **List the employee details department wise:**

select p.deptid,p.empid,d.deptname,e.empname from depart22 d,emply22 e,paydet22 p where e.empid=p.empid and d.deptid=p.deptid;

**output:**

|  |  |  |  |
| --- | --- | --- | --- |
| **DEPTID** | **EMPID** | **DEPTNAME** | **EMPNAME** |
| 5001 | 1001 | cse | ram |
| 5001 | 1002 | cse | jai |
| 5003 | 1004 | mech | sita |
| 5002 | 1003 | eee | rani |

1. **List all the employee names who joined after particular date:**

select p.empid,e.empname from emply22 e,paydet22 p where e.empid=p.empid and p.doj>='11-02-2019';

**output:**

|  |  |
| --- | --- |
| **EMPID** | **EMPNAME** |
| 1001 | ram |
| 1002 | jai |

1. **List the details of employees whose basic salary is between 2000 and 5000**

select p.empid,e.empname from emply22 e,paydet22 p where e.empid=p.empid and p.basic>2000 and p.basic<5000;

**output:**

|  |  |
| --- | --- |
| **EMPID** | **EMPNAME** |
| 1002 | jai |
| 1003 | rani |

1. **Give a count of how many employees are working in each department**

select count(empid),deptid from paydet22 group by deptid;

**output:**

|  |  |
| --- | --- |
| **COUNT(EMPID)** | **DEPTID** |
| 1 | 5003 |
| 2 | 5001 |
| 1 | 5002 |

**7) List the details for an employee\_id=1003**

select \* from emply22 where empid=1003;

**output:**

|  |  |  |
| --- | --- | --- |
| **EMPID** | | **EMPNAME** |
| 1003 | | rani |
|  |  |

**8)** **Give a names of the employees whose netsalary>10,000**

select empname from emply22 e,paydet22 p where e.empid=p.empid and additions>=10000;

**output:**

|  |  |  |
| --- | --- | --- |
| **EMPNAME** | | |
| jai | | |
| sita | | |
| rani | | |
| 3 |  |  |

**9)** **Create a view which lists out the emp\_name, department, basic, deductions,netsalary**

create view vemp22 as(select e.empname,d.deptname,basic,deduction,additions from emply22 e,paydet22 p,depart22 d where e.empid=p.empid and d.deptid=p.deptid)

select \* from vemp22;

**output:**

View created.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **EMPNAME** | **DEPTNAME** | **BASIC** | **DEDUCTION** | **ADDITIONS** |
| ram | cse | 2000 | 6000 | 8000 |
| jai | cse | 3000 | 60000 | 90000 |
| sita | mech | 5000 | 6000 | 11000 |
| rani | eee | 3500 | 6500 | 10000 |

10) **Create a view which lists the emp\_name and his netsalary:**

create view vdett22 as(select e.empname,additions from emply22 e,paydet22 p,depart22 d where e.empid=p.empid and d.deptid=p.deptid)

select \* from vdett22;

**output:**

View created.

|  |  |
| --- | --- |
| **EMPNAME** | **ADDITIONS** |
| ram | 8000 |
| jai | 90000 |
| sita | 11000 |
| rani | 10000 |

**EX.NO:8**

**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 custt22(custno number(3) primary key,custname varchar2(10));

**OUTPUT:**

Table created.

create table mem22(memno number(4) primary key,custno number(3) references custt22(custno));

**output:**

Table created.

create table cass22(cassno number(4) primary key,cassname varchar2(20),lan varchar2(10));

**output:**

Table created.

create table issrec22(issno number(3) primary key,issdate date,memno number(4) references mem22(memno),cassno number(4) references cass22(cassno));

**output:**

Table created.

1. **INSERT QUERY:**

insert into custt22 values(101,'aruvi');

insert into custt22 values(102,'jai');

insert into custt22 values(103,'rani');

insert into custt22 values(104,'sheela');

select \* from custt22;

**output:**

|  |  |
| --- | --- |
| **CUSTNO** | **CUSTNAME** |
| 103 | rani |
| 102 | jai |
| 104 | sheela |
| 101 | aruvi |

insert into mem22 values(1001,101);

insert into mem22 values(1002,102);

insert into mem22 values(1003,101);

insert into mem22 values(1004,103);

insert into mem22 values(1005,104);

select \* from mem22;

**output:**

|  |  |
| --- | --- |
| **MEMNO** | **CUSTNO** |
| 1003 | 101 |
| 1001 | 101 |
| 1002 | 102 |
| 1005 | 104 |
| 1004 | 103 |

insert into cass22 values(5001,'hiphop','english');

insert into cass22 values(5002,'melody','tamil');

insert into cass22 values(5003,'rock n roll','hindi');

select \* from cass22;

**output:**

|  |  |  |
| --- | --- | --- |
| **CASSNO** | **CASSNAME** | **LAN** |
| 5002 | melody | tamil |
| 5003 | rock n roll | hindi |
| 5001 | hiphop | english |

insert into issrec22 values(201,'03-03-2019',1001,5001);

insert into issrec22 values(202,'03-03-2019',1002,5001);

insert into issrec22 values(203,'04-03-2019',1003,5002);

insert into issrec22 values(204,'02-03-2019',1004,5003);

insert into issrec22 values(205,'05-03-2019',1003,5002);

insert into issrec22 values(206,'04-03-2019',1001,5003);

select \* from issrec22;

**output:**

|  |  |  |  |
| --- | --- | --- | --- |
| **ISSNO** | **ISSDATE** | **MEMNO** | **CASSNO** |
| 204 | 02/03/2019 | 1004 | 5003 |
| 205 | 05/03/2019 | 1003 | 5002 |
| 206 | 04/03/2019 | 1001 | 5003 |
| 201 | 03/03/2019 | 1001 | 5001 |
| 203 | 04/03/2019 | 1003 | 5002 |
| 202 | 03/03/2019 | 1002 | 5001 |

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

select c.custname,m.memno from custt22 c,mem22 m where c.custno=m.custno;

**output:**

|  |  |
| --- | --- |
| **CUSTNAME** | **MEMNO** |
| aruvi | 1003 |
| aruvi | 1001 |
| jai | 1002 |
| sheela | 1005 |
| rani | 1004 |

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

select i.issno,c.custname,cc.cassname from custt22 c,mem22 m,cass22 cc,issrec22 i where i.issdate='04-03-2019' and c.custno=m.custno and i.cassno=cc.cassno and i.memno=m.memno;

**output:**

|  |  |  |
| --- | --- | --- |
| **ISSNO** | **CUSTNAME** | **CASSNAME** |
| 206 | aruvi | rock n roll |
| 203 | rani | melody |

**5)List the details of the customer who has borrowed the cassette whose title is ― hiphop:**

select s.custno,s.custname,c.cassno,c.cassname from custt22 s,cass22 c,mem22 m,issrec22 i where m.custno=s.custno and m.memno=i.memno and c.cassno=i.cassno and c.cassname='hiphop';

**output:**

|  |  |  |  |
| --- | --- | --- | --- |
| **CUSTNO** | **CUSTNAME** | **CASSNO** | **CASSNAME** |
| 101 | aruvi | 5001 | hiphop |
| 102 | jai | 5001 | hiphop |

6) **Give a count of how many cassettes have been borrowed by each customer:**

select count(cassno),memno from issrec22 group by memno;

**output:**

|  |  |
| --- | --- |
| **COUNT(CASSNO)** | **MEMNO** |
| 2 | 1003 |
| 2 | 1001 |
| 1 | 1002 |
| 1 | 1004 |

1. **Give a list of book which has been taken by the student with mem\_no as 1004:**

select i.memno,custname,cc.cassname,cc.lan from custt22 c,issrec22 i,mem22 m,cass22 cc where c.custno=m.custno and m.memno=i.memno and cc.cassno=i.cassno and i.memno=1004;

**output:**

|  |  |  |  |
| --- | --- | --- | --- |
| **MEMNO** | **CUSTNAME** | **CASSNAME** | **LAN** |
| 1004 | rani | rock n roll | hindi |

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

select c.cassno,c.cassname,c.lan from cass22 c,mem22 m,issrec22 i,custt22 s where m.memno=i.memno and c.cassno=i.cassno and m.custno=s.custno and i.issdate='04-03-2019';

**output:**

|  |  |  |
| --- | --- | --- |
| **CASSNO** | **CASSNAME** | **LAN** |
| 5003 | rock n roll | hindi |
| 5002 | melody | tamil |

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

create view vcas22 as(select i.issno,i.issdate,s.custname,c.cassname from cass22 c,mem22 m,issrec22 i,custt22 s where m.memno=i.memno and c.cassno=i.cassno and m.custno=s.custno);

select \* from vcas22;

**output:**

View created.

|  |  |  |  |
| --- | --- | --- | --- |
| **ISSNO** | **ISSDATE** | **CUSTNAME** | **CASSNAME** |
| 204 | 02/03/2019 | rani | rock n roll |
| 205 | 05/03/2019 | aruvi | melody |
| 206 | 04/03/2019 | aruvi | rock n roll |
| 201 | 03/03/2019 | aruvi | hiphop |
| 203 | 04/03/2019 | aruvi | melody |
| 202 | 03/03/2019 | jai | hiphop |

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

create view vmem22 as(select i.issno,i.issdate,s.custname from cass22 c,mem22 m,issrec22 i,custt22 s where m.memno=i.memno and c.cassno=i.cassno and m.custno=s.custno and i.issdate<'04-02-2019');

select \* from vmem22;

**output:**

View created.

|  |  |  |
| --- | --- | --- |
| **ISSNO** | **ISSDATE** | **CUSTNAME** |
| 204 | 02/03/2019 | rani |
| 201 | 03/03/2019 | aruvi |
| 202 | 03/03/2019 | jai |