Ex. No : 8 – Answer Key

1.

show databases;
create database lab8_tables;
use lab8_tables;

2.

create table Dept(department_id int primary key , department_name VARCHAR(20) NOT NULL , manager_id int, loc varchar(10));

create table Emp(EMP_no int primary key, Emp_name varchar(10), Job varchar(10), Hiredata date, Salary float, Comm Float, Depno int references Dept(department_id));

3. Insert Data into both tables

INSERT INTO Emp VALUES(1,'Steven', 'Marketing', STR_TO_DATE('06-jan-1995', '%d-%M-%Y'),24000, NULL,2);
INSERT INTO Emp VALUES(2,'Neena', 'FI_ACCOUNT', STR_TO_DATE('06-feb-1987', '%d-%M-%Y'),34000, NULL,1);
INSERT INTO Emp VALUES(3,'Lex', 'FI_MGR', STR_TO_DATE('06-jan-1980', '%d-%M-%Y'),240000, NULL,1);
INSERT INTO Emp VALUES(4,'Alexander', 'Sa_Rep', STR_TO_DATE('06-jun-1987', '%d-%M-%Y'),20000, NULL,4);
INSERT INTO Emp VALUES(5,'Bruce', 'IT_PROG',STR_TO_DATE('06-jul-1990', '%d-%M-%Y'),24000, NULL,4);
INSERT INTO Emp VALUES(6,'David', 'IT_PROG', STR_TO_DATE('06-sep-1991', '%d-%M-%Y'),22000, NULL,4);
INSERT INTO Emp VALUES(7,'vipin', 'IT_PROG', STR_TO_DATE('16-nov-1987', '%d-%M-%Y'),28000, NULL,4);
INSERT INTO Emp VALUES(8,'Diana', 'Pur_Man', STR_TO_DATE('26-jan-1987', '%d-%M-%Y'),24000, NULL,3);
INSERT INTO Emp VALUES(9,'John', 'FI_ACCOUNT',STR_TO_DATE('1-dec-1992', '%d-%M-%Y'), 24000, NULL,1);
INSERT INTO Emp VALUES(10,'Ismael', 'CLERK', STR_TO_DATE('29-mar-1994', '%d-%M-%Y'), 4000, NULL,3);
INSERT INTO Emp VALUES(11,'Mathew', 'CLERK', STR_TO_DATE('12-oct-1992', '%d-%M-%Y'), 46000, 200,3);
INSERT INTO Emp VALUES(12,'Hayes', 'Marketing', STR_TO_DATE('21-apr-1998', '%d-%M-%Y'), 14000, 1000,3);
INSERT INTO Emp VALUES(13,'sarun', 'Marketing', STR_TO_DATE('18-may-1993', '%d-%M-%Y'), 18000, NULL,2);
INSERT INTO Emp VALUES(14,'Henin', 'FI_MGR', STR_TO_DATE('06-aug-1980', '%d-%M-%Y'), 240000, NULL,1);
INSERT INTO Emp VALUES(15,'Greesh','Clerk', STR_TO_DATE('06-aug-1980', '%d-%M-%Y'),240000, NULL,5);

INSERT INTO Dept values(1, 'Administration', null, 'Boston');
INSERT INTO Dept values(2, 'Marketing', null, 'Boston');
INSERT INTO Dept values(3, 'Purchase', null, 'perryridge');
INSERT INTO Dept values(4, 'Programming',null, 'Hudson');
INSERT INTO Dept values(5, 'HR', null, 'Hudson');

4.

alter table Dept add foreign key(manager_id) references Emp(EMP_no);

update Dept set manager_id=2 where department_id=1;
update Dept set manager_id=1 where department_id=2;
update Dept set manager_id=8 where department_id=3;
update Dept set manager_id=7 where department_id=4;
*select * from Dept;*

5. Do the following queries

#1 Display the name and salary for all employees whose salary is not in the range of 5000 and 35000
select Emp_name, Salary from Emp where Salary not between 5000 and 35000;

#2 Display the employee name, job ID, and start date of employees hired between February
20, 1990, and May 1, 1998. Order the query in ascending order by start date.
select Emp_name, Salary, Job, Hiredate from Emp where Hiredate between '1990-02-20' and '1998-05-01' order by Hiredate;

#3 list the name and salary of employees who earn between 5,000 and12,000, and are in
department 2 or 4. Label the columns Employee and Monthly Salary,respectively.
SELECT Emp_name 'Employee', Salary 'Monthly Salary', Depno FROM Emp WHERE Salary BETWEEN 5000 AND 30000 AND Depno IN (2, 4);

#4 Display the name and hire date of every employee who was hired in 1994.
select Emp_name, hiredate from Emp where hiredate like '1994%';

#5 Display the name, salary, and commission for all employees who earn commissions. Sort
data in descending order of salary and commissions.
select Emp_name, Salary, Comm from Emp where comm >0 order by Salary desc, Comm desc;

#6 Display the name and job title of all employees who do not have a manager.
select Emp_name, Job from Emp, Dept where manager_id is null and Emp.Depno= Dept.department_id;

#7 Display the names of all employees where the third letter of the name is an a.
select Emp_name from Emp where Emp_name like '__a%';

#8 Display the name of all employees who have an a and an e in their name.
select Emp_name from Emp where Emp_name like '%a%' and emp_name like '%e%';

#9 Display the name, job, and salary for all employees whose job is sales representative or
stock clerk and whose salary is not equal to 2,0000, 4000, or 7,000.
select Emp_name, Job, Salary from Emp where Job in ('Sa_rep', 'CLERK') and Salary not in (2000, 4000, 7000);

#10 Write a query that displays the employee's names with the first letter capitalized and all
other letters lowercase and the length of the name for all employees whose name starts with
J, A, or M. Give each column an appropriate label. Sort the results by the employees' names.
select upper(Emp_name) "Name", length(emp_name) "Length" from Emp where Emp_name like 'J%' or Emp_name like 'M%' or Emp_name like 'A%' order by Emp_name;

#11 Write a query to display the name, department number, and department name for al employees.
select Emp.Emp_name, Emp.Depno, Dept.department_name from Emp , Dept where Emp.Depno = Dept.department_id order by Dept.department_name;

#12 Create a query to display the name and hire date of any employee hired after employee Mathew
select Emp_Name, Hiredate from Emp where ((Hiredate)>any(select Hiredate from Emp where Emp_Name='Mathew'));

#13 Display the names and hire dates for all employees who were hired before their
managers, along with their manager's names and hire dates. Label the columns Employee,
EmpHired, Manager, and Mgr Hired, respectively.
select E.EMP_no, E.Emp_name 'Employee' , E.Hiredate 'EMP Hire Date' , E.Depno 'dept no', M.Emp_name 'Manager Name' , M.Hiredate 'Manager Hiredate'
from Emp E, Dept, Emp M
where Dept.manager_id = M.EMP_no
and E.Depno=Dept.department_id
and E.Hiredate < M.Hiredate;

#14 Write a query to display the number of people with the same job.
select Job, COUNT(*) 'No: of Jobs' from Emp group by Job;

#15 Display the manager number and the salary of the lowest paid employee for that
manager.Exclude anyone whose manager is not known. Exclude any groups where the
minimum salary is less than 6,000. Sort the output in descending order of salary.
select min(Salary) 'MINIMUM SALARY', manager_id, department_name
from Emp,Dept
where Emp.depno=Dept.department_id and manager_id is not null group by manager_id, department_name having MIN(Salary) > 6000 order by 'MINIMUM SALARY' desc;

#16 Write a query to display each department's name, location, number of employees, and the
average salary for all employees in that department. Label the columns Name, Location, Number of People,
#and Salary, respectively. Round the average salary to two decimal places
select D.department_name 'Name', D.loc 'Location ', COUNT(*) 'Number of People', ROUND(AVG(salary),2) 'Salary'
from Emp E, Dept D where E.depno = D.department_id group by D.department_name, D.loc;

#17 Write a query to display the name and hire date of any employee in the same department as amit. Exclude JOHN.
select Emp_name, Hiredate from Emp where Depno = (select Depno from Emp where Emp_name = 'John') and emp_name<>'John';

#18 Write a query that displays the employee numbers names of all employees who work in a
department with any employee whose name contains a u.
select EMP_no, Emp_name, department_name from Emp, Dept where Depno in (select Depno from Emp where Emp_name like '%u%') and Emp.Depno=Dept.department_id;

#20 display employee name and department name of all employees that work in a department
that has at least 2 employees. Order the list in alphabetical order first by department name, then by employee name.
select Emp_name, department_name from Emp, Dept where Emp.depno = Dept.department_id and Emp.depno in (select Depno from Emp group by Depno having count(*) >3) order by department_name, Emp_name;