U19CS076 DBMS ASSIGNMENT 4

KRITHIKHA BALAMURUGAN

Q1.Use Employee table from Assignment 3

BEGIN TRANSACTION;

/* Create a table called Employee */

CREATE TABLE EMPLOYEE(EmpID number(6) PRIMARY KEY, Name varchar(25),Department varchar(30),ManagerID number(6),JoiningDate Date,Salary number(8));

/* Inserting few records in this table */

INSERT INTO EMPLOYEE VALUES(111,'Krithikha','HR',12345,'2020-24-12',272000);

INSERT INTO EMPLOYEE VALUES(412,'Lucy','Marketing',23432,'2018-1-21',51200);

INSERT INTO EMPLOYEE VALUES(352,'Robert','Purchase',23321,'2017-3-19',120000);

INSERT INTO EMPLOYEE VALUES(202,'Shivani','Purchase',33212,'2009-11-2',42800);

INSERT INTO EMPLOYEE VALUES(236,'Ashwin','HR',19922,'2020-1-29',212000);

INSERT INTO EMPLOYEE VALUES(135,'Kartik','Service',99121,'2021-1-2',22300);

INSERT INTO EMPLOYEE VALUES(286,'Frank','Accounts',12342,'2019-3-12',90000);

INSERT INTO EMPLOYEE VALUES(491,'Hopper','Purchase',43255,'2018-10-12',30200);

INSERT INTO EMPLOYEE VALUES(449,'Akane','Purchase',77373,'2018-3-12',30800);

INSERT INTO EMPLOYEE VALUES(332,'Rohit','Purchase',29943,'2016-1-2',60200);

COMMIT;

```
111|Krithikha|HR|12345|2020-24-12|272000
412|Lucy|Marketing|23432|2018-1-21|51200
352|Robert|Purchase|23321|2017-3-19|120000
202|Shivani|Purchase|33212|2009-11-2|42800
236|Ashwin|HR|19922|2020-1-29|212000
135|Kartik|Service|99121|2021-1-2|22300
286|Frank|Accounts|12342|2019-3-12|90000
491|Hopper|Purchase|43255|2018-10-12|30200
449|Akane|Purchase|77373|2018-3-12|30800
332|Rohit|Purchase|29943|2016-1-2|60200
```

1.Display Manager Id of employees whose name starts with 'A'.

Select ManagerID from Employee where name like'A%';

```
19922
77373
```

2. Display employees Id and employee name, department wise.

Select department,EmpID,Name from Employee order by department;

```
Accounts|286|Frank
HR|111|Krithikha
HR|236|Ashwin
Marketing|412|Lucy
Purchase|352|Robert
Purchase|202|Shivani
Purchase|491|Hopper
Purchase|449|Akane
Purchase|332|Rohit
Service|135|Kartik
```

3. Display employee count department wise.

select department,count(*) from Employee group by Department;

```
Accounts|1
HR|2
Marketing|1
Purchase|5
Service|1
```

4. Display all columns of employees whose experience is more than 3 years.

select * from EMPLOYEE where (current_date-Joiningdate)>3;

```
352|Robert|Purchase|23321|2017-3-19|120000
202|Shivani|Purchase|33212|2009-11-2|42800
332|Rohit|Purchase|29943|2016-1-2|60200
```

5. Display departments with more than 5 employees.

select department from Employee group by Department having count(*)>=5;

```
Purchase
```

6. Display employees Id and employee name whose salary is greater than 50000,

department wise.

select EmpID,name from Employee where salary > 50000 order by Department;

```
286|Frank
111|Krithikha
236|Ashwin
412|Lucy
352|Robert
332|Rohit
```

7. Display average salary of employees in department wise.

select department,avg(salary) from employee group by department;

```
Accounts|90000.0
HR|242000.0
Marketing|51200.0
Purchase|56800.0
Service|22300.0
```

8. Display Employee Id and Name of employee with highest salary.

select empid,name from employee where salary in(Select max(salary) from employee);

```
111|Krithikha
```

9. Display employees Id and employee name with least salary

select empid,name from employee where salary in (Select min(salary) from employee);

```
135|Kartik
```

10. Display employees Id and employee name with second highest salary.

select empid,name from employee where salary in (Select max(salary) from employee where salary<(select max(salary) from employee));

```
236|Ashwin
```

Use Student table from Assignment 3

BEGIN TRANSACTION;

/* Create a table called STUDENT */

CREATE TABLE STUDENT(RollNo number(6) PRIMARY KEY, Name varchar(25),Department varchar(5),semester number(3),DOB date,AdmissionDate date,HostelRoom number(5));

/* Create few records in this table */

INSERT INTO STUDENT VALUES(1,'Krithikha','CSE',1,'2002-12-24','2021-12-01',222);

INSERT INTO STUDENT VALUES(412,'Lucy','ECE',4,'1999-08-24','2018-01-21',312);

INSERT INTO STUDENT VALUES(352,'Robert','EE',3,'2000-12-12','2019-03-19',101);

INSERT INTO STUDENT VALUES(202,'Ashwin','CSE',2,'2001-08-08','2020-11-02',229);

INSERT INTO STUDENT VALUES(236,'Shivani','MECH',2,'2001-09-04','2020-01-29',272);

INSERT INTO STUDENT VALUES(135,'Kartik','CSE',2,'2002-01-04','2021-01-02',223);

INSERT INTO STUDENT VALUES(2866,'Frank','EE',2,'2003-08-28','2020-03-12',270);

INSERT INTO STUDENT VALUES(491,'Hopper','EE',4,'1999-08-13','2018-10-12',302);
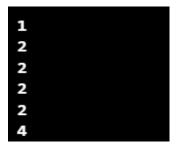
INSERT INTO STUDENT VALUES(449,'Jane','ECE',4,'1999-05-04','2018-03-12',308);

INSERT INTO STUDENT VALUES(332,'Rohit','CSE',3,'2000-06-20','2019-09-22',NULL);

COMMIT;

```
1|Krithikha|CSE|1|2002-12-24|2021-12-01|222
412|Lucy|ECE|4|1999-08-24|2018-01-21|312
352|Robert|EE|3|2000-12-12|2019-03-19|101
202|Ashwin|CSE|2|2001-08-08|2020-11-02|229
236|Shivani|MECH|2|2001-09-04|2020-01-29|272
135|Kartik|CSE|2|2002-01-04|2021-01-02|223
2866|Frank|EE|2|2003-08-28|2020-03-12|270
491|Hopper|EE|4|1999-08-13|2018-10-12|302
449|Jane|ECE|4|1999-05-04|2018-03-12|308
332|Rohit|CSE|3|2000-06-20|2019-09-22|
```

1. Display semester of students whose name has the letter 'a'.

select semester from student where name like '%a%';

```
1
2
2
2
2
4
```

2. Display count of students semester wise.

select semester,count(*) from student group by semester;

```
1|1
2|4
3|2
4|3
```

3. Display students' names from every department whose roll number is 1.

select department,name from student where RollNO=1 order by department;

```
CSE|Krithikha
```

4. Display student name and semester of students who are not staying in the hostel.

select name,semester from student where hostelRoom is NULL;

```
Rohit|3
```

5. Display student count in each semester whose birth month is august.

select semester, count(*) from student where strftime('%m',DOB)='08' group by semester;

```
2|2
4|2
```

6. Display roll number and name of the student who was the first one to get admission in the college.

select rollNo, Name from student where admissionDate=(Select min(AdmissionDate) from student);

```
412|Lucy
```

7. Display the average count of students. (In any semester)

select count(*) / count(distinct semester) from student;

```
2
```

8. For every month (Jan-Dec) display the count of students who are having birthdays in that month.

select strftime('%m',DOB),count(*) from student group by strftime('%m',DOB);

```
01|1
05|1
06|1
08|4
09|1
12|2
```

9. Display count of students who have taken admission in the last six months.

select count(*) from student where AdmissionDate > date('now','-6 months');

```
3
```

10. Display semester with least number of students.

select semester from (Select *,min(cnt) from(Select *,count(*) as cnt from student group by semester));

```
1
```