

Queries(12-19)

12. For every project located in 'Stafford', list the project number, the controlling department number, and the department manager's last name, address, and birthdate.

```
SELECT P.PNUMBER, P.DNUM, D.MGR_SSN, E.LNAME,  
E.ADDRESS, E.BDATE FROM EMPLOYEE E, DEPARTMENT D,  
PROJECT P WHERE E.DNO=D.DNUMBER and  
D.DNUMBER=P.DNUM and P.PLOCATION='STAFFORD';
```

```
MariaDB [COMPANY]> SELECT P.PNUMBER, P.DNUM, D.MGR_SSN, E.LNAME, E.ADDRESS, E.BDATE FROM EMPLOYEE E, DEPARTMENT D, PROJECT P WHERE E.DNO=D.DNUMBER and D.DNUMBER=P.DNUM  
and P.PLOCATION='STAFFORD';
```

PNUMBER	DNUM	MGR_SSN	LNAME	ADDRESS	BDATE
10	4	987987987	Wallace	291 Berry, Bellaire, TX	1941-06-20
10	4	987987987	Zelaya	3321 Castle, Spring, TX	1968-01-19
30	4	987987987	Wallace	291 Berry, Bellaire, TX	1941-06-20
30	4	987987987	Zelaya	3321 Castle, Spring, TX	1968-01-19

```
4 rows in set (0.001 sec)
```

13. For each employee, retrieve the employee's name, and the name of his or her immediate supervisor.

```
SELECT E1.FNAME, E1.LNAME, E2.FNAME as SupervisorFNAME,  
E2.LNAME as SupervisorLNAME FROM EMPLOYEE E1, EMPLOYEE  
E2 WHERE E1.SSN = E2.SUPER_SSN;
```

```
MariaDB [COMPANY]> SELECT E1.FNAME, E1.LNAME, E2.FNAME as SupervisorFNAME, E2.LNAME as SupervisorLNAME FROM EMPLOYEE E1, EMPLOYEE E2 WHERE E1.SSN = E2.SUPER_SSN;
```

FNAME	LNAME	SupervisorFNAME	SupervisorLNAME
Franklin	Wong	John	Smith
James	Borg	Franklin	Wong
Franklin	Wong	joyce	English
John	Smith	Terisa	lopez
Franklin	Wong	Ramesh	Narayan
John	Smith	David	Robert
Bobby	Smith	Rosy	Beth
David	Robert	Daniel	Michael
Rosy	Beth	Ankit	Kohli
Ankit	Kohli	Andrew	Thomas
Ankit	Kohli	Kavita	Gupta
James	Borg	Jennifer	Wallace
Jennifer	Wallace	Yashika	Kumari
Jennifer	Wallace	Ahmad	Jabbar
Jennifer	Wallace	Alicia	Zelaya

15 rows in set (0.001 sec)

14. Retrieve all combinations of Employee Name and Department Name.

- SELECT CONCAT(FNAME," ",MINIT," ",LNAME) AS ENAME,DNAME FROM EMPLOYEE,DEPARTMENT WHERE DNO=DNUMBER;
- SELECT CONCAT(FNAME," ",MINIT," ",LNAME) AS ENAME,DNAME FROM EMPLOYEE,DEPARTMENT;

```
MariaDB [COMPANY]> SELECT CONCAT(FNAME," ",MINIT," ",LNAME) AS ENAME,DNAME FROM EMPLOYEE,DEPARTMENT WHERE DNO=DNUMBER;
```

ENAME	DNAME
Jennifer S Wallace	Administration
Alicia J Zelaya	Administration
James E Borg	Headquarters
Franklin T Wong	Marketing
Terisa N lopez	Marketing
David M Robert	Marketing
Bobby B Smith	Marketing
Rosy K Beth	Marketing
Daniel M Michael	Marketing
Ankit K Kohli	Marketing
Andrew K Thomas	Marketing
Kavita M Gupta	Marketing
Elley M Michael	Marketing
Yashika M Kumari	Marketing
John B Smith	Research
joyce A English	Research
Ramesh K Narayan	Research
Ahmad V Jabbar	Sales

18 rows in set (0.001 sec)

15. Make a list of all project numbers for projects that involve an employee whose

last name is 'Narayan' either as a worker or as a manager of the department that controls the project.

```
(SELECT DISTINCT PNUMBER FROM  
PROJECT,DEPARTMENT,EMPLOYEE WHERE DNUM=DNUMBER  
AND MGR_SSN=SSN AND LNAME="NARAYAN") UNION (SELECT  
DISTINCT PNUMBER FROM PROJECT, WORKS_ON, EMPLOYEE  
WHERE PNUMBER=PNO AND ESSN=SSN AND  
LNAME="NARAYAN");
```

```
MariaDB [COMPANY]> (SELECT DISTINCT PNUMBER FROM PROJECT,DEPARTMENT,EMPLOYEE WHERE DNUM=DNUMBER AND MGR_SSN=SSN AND LNAME="NARAYAN") UNION (SELECT DISTINCT PNUMBER FROM  
PROJECT, WORKS_ON, EMPLOYEE WHERE PNUMBER=PNO AND ESSN=SSN AND LNAME="NARAYAN");  
+-----+  
| PNUMBER |  
+-----+  
|      10 |  
+-----+  
1 row in set (0.001 sec)
```

16.Increase the salary of all employees working on the 'ProductX' project by 15% .Retrieve employee name and increased salary of these employees.

```
UPDATE EMPLOYEE SET SALARY = 1.15 * SALARY WHERE  
DNO=(SELECT DNUM FROM PROJECT WHERE PNAME =  
"ProductX");
```

```
SELECT FNAME, LNAME, SALARY AS INCREASED_SALARY FROM  
EMPLOYEE;
```

```

MariaDB [company]> UPDATE EMPLOYEE SET SALARY = 1.15 * SALARY WHERE DNO=(SELECT DNUM FROM PROJECT WHERE PNAME = "ProductX");
Query OK, 3 rows affected (0.007 sec)
Rows matched: 3 Changed: 3 Warnings: 0

MariaDB [company]> SELECT FNAME, LNAME, SALARY AS INCREASED_SALARY FROM EMPLOYEE;
+-----+-----+-----+
| FNAME | LNAME | INCREASED_SALARY |
+-----+-----+-----+
| John  | Smith | 34500.00         |
| Franklin | Wong  | 42000.00         |
| Joyce  | English | 28750.00         |
| Terisa | Lopez  | 68000.00         |
| Ramesh | Narayan | 59800.00         |
| David  | Robert | 52000.00         |
| Bobby  | Smith  | 56000.00         |
| Rosy   | Beth   | 58000.00         |
| Daniel | Michael | 58000.00         |
| Ankit  | Kohli  | 65000.00         |
| James  | Borg   | 55000.00         |
| Andrew | Thomas | 64000.00         |
| Kavita | Gupta  | 57000.00         |
| Jennifer | Wallace | 43000.00         |
| Elley  | Michael | 61000.00         |
| Yashika | Kumari | 51500.00         |
| Ahmad  | Jabbar | 25000.00         |
| Alicia | Zelaya | 25000.00         |
+-----+-----+-----+
18 rows in set (0.001 sec)

```

17.Retrieve a list of employees and the project name each works in, ordered by the employee's department, and within each department ordered alphabetically by employee first name.

SELECT DNAME, FNAME, LNAME, PNAME FROM DEPARTMENT, EMPLOYEE, WORKS_ON, PROJECT WHERE DNUMBER=DNO AND SSN=ESSN AND PNO=PNUMBER ORDER BY DNAME, FNAME;

```

MariaDB [COMPANY]> SELECT DNAME, FNAME, LNAME, PNAME FROM DEPARTMENT, EMPLOYEE, WORKS_ON, PROJECT WHERE DNUMBER=DNO AND SSN=ESSN AND PNO=PNUMBER ORDER BY DNAME, FNAME;
+-----+-----+-----+-----+
| DNAME | FNAME | LNAME | PNAME |
+-----+-----+-----+-----+
| Admistration | Alicia | Zelaya | Newbenefite |
| Admistration | Alicia | Zelaya | Computerization |
| Admistration | Jennifer | Wallace | Reorganisation |
| Headquarters | James | Borg | Computerization |
| Marketing | Franklin | Wong | Reorganisation |
| Marketing | Franklin | Wong | Computerization |
| Marketing | Franklin | Wong | ProductZ |
| Marketing | Franklin | Wong | ProductY |
| Research | John | Smith | ProductY |
| Research | John | Smith | ProductX |
| Research | Joyce | English | Computerization |
| Research | Joyce | English | ProductY |
| Research | Ramesh | Narayan | Computerization |
| Sales | Ahmad | Jabbar | Computerization |
| Sales | Ahmad | Jabbar | Newbenefite |
+-----+-----+-----+-----+
15 rows in set (0.001 sec)

```

18. Select the names of employees whose salary does not match with salary of any employee in department 10

SELECT FNAME, LNAME FROM EMPLOYEE WHERE SALARY NOT IN (SELECT SALARY FROM EMPLOYEE WHERE DNO=10);

```
MariaDB [COMPANY]> SELECT FNAME, LNAME FROM EMPLOYEE WHERE SALARY NOT IN (SELECT SALARY FROM EMPLOYEE WHERE DNO=10);
```

FNAME	LNAME
John	Smith
Joyce	English
James	Borg
Jennifer	Wallace
Ahmad	Jabbar
Alicia	Zelaya

6 rows in set (0.001 sec)

19. Retrieve the name of each employee who has a dependent with the same first name and same sex as the employee

SELECT E.FNAME, E.LNAME FROM EMPLOYEE AS E WHERE E.SSN IN (SELECT ESSN FROM DEPENDENT AS D WHERE E.FNAME=D.DEPENDENT_NAME AND E.SEX=D.SEX);

```
MariaDB [COMPANY]> SELECT E.FNAME, E.LNAME FROM EMPLOYEE AS E WHERE E.SSN IN (SELECT ESSN FROM DEPENDENT AS D WHERE E.FNAME=D.DEPENDENT_NAME AND E.SEX=D.SEX);
```

FNAME	LNAME
Alicia	Zelaya

1 row in set (0.001 sec)