

**Query 11.** Retrieve the distinct salary of every employee

SELECT DISTINCT Salary

FROM EMPLOYEE;

**Query 12.** Retrieve all employees whose address is in Houston, Texas.

SELECT Fname, Lname

FROM EMPLOYEE

WHERE Address LIKE ‘%Houston,TX%’;

**Query 14.** Retrieve all employees in department 5 whose salary is between $30,000 and $40,000. SELECT \*

FROM EMPLOYEE

WHERE (Salary BETWEEN 30000 AND 40000) AND Dno = 5;

**Query 15.** Retrieve a list of employees work in department 4 ordered alphabetically by last name, then first name.

SELECT \*

FROM EMPLOYEE E

WHERE Dno=4

ORDER BY Lname,Fname;

**Query 0.** Retrieve the birth date and address of the employee(s) whose name is ‘John B. Smith’.

SELECT Bdate, Address

FROM EMPLOYEE

WHERE Fname=‘John’ AND Minit=‘B’ AND Lname=‘Smith’;

**Query 1.** Retrieve the name and address of all employees who work for the ‘Research’ department

SELECT Fname, Lname, Address

FROM EMPLOYEE, DEPARTMENT

WHERE Dname=‘Research’ AND Dnumber=Dno;

**Query 2.** For every project located in ‘Stafford’, list the project number, the controlling department number, and the department manager’s last name, address, and birth date.

SELECT Pnumber, Dnum, Lname, Address, Bdate

FROM PROJECT, DEPARTMENT, EMPLOYEE

WHERE Dnum=Dnumber AND Mgr\_ssn=Ssn AND Plocation=‘Stafford’;

1. **Retrieve the names of employees in department 5 who work more than 10 hours per week on the 'ProductX' project.**

SELECT LNAME, FNAME

FROM EMPLOYEE, WORKS\_ON, PROJECT

WHERE DNO=5 AND SSN=ESSN AND PNO=PNUMBER AND PNAME='ProductX' AND HOURS>10

1. **List the names of employees who have a dependent with the same first name as themselves.**

SELECT LNAME, FNAME

FROM EMPLOYEE, DEPENDENT

WHERE SSN=ESSN AND FNAME=DEPENDENT\_NAME

1. For each project, list the project name and the total hours per week (by all employees) spent on that project.

SELECT PNAME, SUM (HOURS)

FROM PROJECT, WORKS\_ON

WHERE PNUMBER=PNO

GROUP BY PNAME

1. **For each department, retrieve the department name, and the average salary of employees working in that department**.

SELECT DNAME, AVG (SALARY)

FROM DEPARTMENT, EMPLOYEE

WHERE DNUMBER=DNO

GROUP BY DNAME

1. Retrieve the average salary of all female employees.

SELECT AVG (SALARY)

FROM EMPLOYEE

WHERE SEX='F'

1. **List the SSN and names of all Employees who are female but do not**

**work in the research department**

**SELECT SSN, fmane, lname**

**FROM EMPLOYEE , DEPARTMENT**

**WHERE dno=** **dnumber and sex = ' female' AND dname NOT LIKE % research% ;**

1. **Get department name & the average salary of all employees in each department.**

**SELECT dname, AVG(salary) AS MYAVG**

**FROM EMPLOYEE, DEPARTMENT**

**WHERE dno = dnumber;**

1. **List the SSN and names of all Employees who either are female or**

**work in the research department.**

**SELECT SSN, fmane, lname**

**FROM EMPLOYEE , DEPARTMENT**

**WHERE dno=** **dnumber and sex = ' female' OR dname LIKE % research% ;**

Use the above schema to write the SQL commands required to answer the following queries.

PARTS (Pno, Pname, quantity, price, Olevel)

ODETAILS (Ono, Pno, Qty)  
CUSTOMERS (Cno, Cname, street, zip, phone)

ZIP\_CODE (zip, city)  
EMPLOYEES (Eno, Ename, zip, Hdate)

Emp\_Order (Ono, Ename)  
ORDERS (Ono, Cno, Eno, ReceivedDate, ShippedDate)

1. Add rows into the Emp\_Order table. Note that the table describes the employees and the orders they've taken.

INSERT INTO Emp\_Order ( SELECT Ono,Ename

FROM ORDERS, EMPLOYEES

WHERE ORDERS.Eno = EMPLOYEES.Eno);

1. Change the address of customer Tom to 163 Main street.

UPDATE CUSTOMERS

SET street = ‘163 Main street’

WHERE Cname = ‘Tom’;

1. Change the quantity of the all orders, done by customer 111, to 2 parts.

UPDATE ODETAILS

SET Qty = 2

WHERE Ono IN (SELECT Ono From ORDERS WHERE Cno = ‘111’ );

1. Delete all orders that where ordered from employee John.

DELETE FROM ORDERS

WHERE Eno IN (SELECT Eno FROM EMPLOYEES WHERE Ename = ‘John’);