

**Question #1: Answer the following queries:**

1. Retrieve the distinct salary of every employee
2. Retrieve all employees whose address is in Houston, Texas.
3. Retrieve all employees in department 5 whose salary is between $30,000 and $40,000.
4. Retrieve a list of employees work in department 4 ordered alphabetically by last name, then first name.
5. Retrieve the birth date and address of the employee(s) whose name is ‘John B. Smith’.
6. Retrieve the name and address of all employees who work for the ‘Research’ department
7. 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.
8. Retrieve the names of employees in department 5 who work more than 10 hours per week on the 'ProductX' project.
9. List the names of employees who have a dependent with the same first name as themselves.
10. For each project, list the project name and the total hours per week (by all employees) spent on that project.
11. For each department, retrieve the department name, and the average salary of employees working in that department.
12. Retrieve the average salary of all female employees.
13. List the SSN and names of all Employees who either are female or work in the research department.
14. Get department name & the average salary of all employees in each department.
15. List the SSN and names of all Employees who are female but do not work in the research department
16. Display a list of each department and how many employees assigned to it.
17. For each department find the department number and how many employees who get salary over 1500.
18. Display a list of each department and the sum and the average of its employees salaries.
19. Display a list of departments that have more than 3 employees.

**Question #2: Use the following 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.
2. Change the address of customer Tom to 163 Main street.
3. Change the quantity of the all orders, done by customer 111, to 2 parts.
4. Delete all orders that where ordered from employee John.