Homework

Answer the questions by SQL.

1. List all the employees whose salaries are more than 3000.

SELECT \* FROM EMP WHERE SAL > 3000;

1. List all the employees whose names begin with “S”.

SELECT \* FROM EMP WHERE ENAME LIKE 'S%';

1. List the employees whose name is “SMITH”, “ALLEN” or “FORD”.

SELECT \* FROM EMP WHERE ENAME IN ('SMITH', 'ALLEN','FORD');

1. List all the employees whose department is “SALES”.

SELECT \* FROM EMP WHERE DEPTNO = (SELECT DEPTNO FROM DEPT WHERE DNAME = 'SALES');

1. To get the value of average, biggest, smallest and total of each department, and order by department number.

SELECT D.DEPTNO, AVG(E.SAL), MAX(E.SAL), MIN(E.SAL), SUM(E.SAL)

FROM EMP E

JOIN DEPT D ON D.DEPTNO = E.DEPTNO

GROUP BY D.DEPTNO

ORDER BY D.DEPTNO;

1. To get the total number of employees, whose salary is more than 3000 for each department.

SELECT D.DNAME, COUNT(E.EMPNO) FROM EMP E

JOIN DEPT D ON D.DEPTNO = E.DEPTNO

WHERE E.SAL >= 3000

GROUP BY D.DNAME;

1. TO get the number of the average salary for each department, according to the department name in ascending order

SELECT D.DNAME, AVG(E.SAL) FROM EMP E

RIGHT JOIN DEPT D ON D.DEPTNO = E.DEPTNO

GROUP BY D.DNAME

ORDER BY D.DNAME ASC;

1. List the statistics of employees who have the same salary in each department, list their department number, salary, and number of employees.

SELECT D.DEPTNO, E1.SAL, COUNT(E1.EMPNO)

FROM DEPT D

JOIN EMP E1

ON D.DEPTNO = E1.DEPTNO

JOIN EMP E2

ON E1.EMPNO = E2.EMPNO

WHERE E.SAL = E2.SAL

HAVING COUNT(E1.EMPNO) > 1

GROUP BY D.DEPTNO, E1.SAL

ORDER BY DEPTNO;

1. List the number of employees with more than 2 employees in the same department, showing the name of the Department, the name of the area, and the number of the employees in the same department

SELECT D.DNAME, D.LOC, COUNT(E.EMPNO)

FROM DEPT D

JOIN EMP E

ON D.DEPTNO = E.DEPTNO

HAVING COUNT(E.EMPNO) > 1

GROUP BY D.DNAME, D.LOC;

1. List the name and salary of employees whose salaries is higher than the average salary of the entire firm

SELECT E.ENAME, E.SAL FROM EMP E

WHERE E.SAL > (SELECT AVG(E.SAL) FROM EMP E);