|  |  |  |
| --- | --- | --- |
| **2021. 6. 01. 수업과제** | **제출일 : 2021. 06. 01** | **B반 201844050 박승민** |

<질의1> 30번 부서에 근무하는 SALESMAN의 사원이름을 검색해라.

<SQL>

SELECT ename

FROM emp

WHERE deptno = 30

and job = "salesman";

<결과>

|  |
| --- |
| ename |
| ALLEN |
| WARD |
| MARTIN |
| TURNER |

<질의2> 사원들의 부서번호 중복을 제거하고 검색해라.

<SQL>

SELECT DISTINCT deptno

FROM emp;

<결과>

|  |
| --- |
| deptno |
| 10 |
| 20 |
| 30 |

<질의3> 커미션을 받지 않는 사원의 이름을 검색해라.

<SQL>

SELECT ename

FROM emp

WHERE comm is null;

<결과>

|  |
| --- |
| ename |
| SMITH |
| JONES |
| BLAKE |
| CLARK |
| SCOTT |
| KING |
| ADAMS |
| JAMES |
| FORD |
| MILLER |

<질의4> 직무가 'SALESMAN'이고 급여가 1500이상인 사원을 검색해라.

<SQL>

SELECT \*

FROM emp

WHERE sal >= 1500

and job = "salesman";

<결과>

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| EMPNO | ENAME | JOB | MGR | HIREDATE | SAL | COMM | DEPTNO |
| 7499 | ALLEN | SALESMAN | 7698 | 1981-02-20 | 1600 | 300 | 30 |
| 7844 | TURNER | SALESMAN | 7698 | 1981-09-08 | 1500 | 0 | 30 |

<질의5> 사원들의 정보를 부서번호 순으로 정렬해서 검색해라.

<SQL>

SELECT \*

FROM emp

ORDER BY deptno;

<결과>

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| EMPNO | ENAME | JOB | MGR | HIREDATE | SAL | COMM | DEPTNO |
| 7934 | MILLER | CLERK | 7782 | 1982-01-23 | 1300 |  | 10 |
| 7839 | KING | PRESIDENT |  | 1981-11-17 | 5000 |  | 10 |
| 7782 | CLARK | MANAGER | 7839 | 1981-06-09 | 2450 |  | 10 |
| 7902 | FORD | ANALYST | 7566 | 1981-12-03 | 3000 |  | 20 |
| 7876 | ADAMS | CLERK | 7788 | 1987-07-13 | 1100 |  | 20 |
| 7788 | SCOTT | ANALYST | 7566 | 1987-07-13 | 3000 |  | 20 |
| 7566 | JONES | MANAGER | 7839 | 1981-04-02 | 2975 |  | 20 |
| 7369 | SMITH | CLERK | 7902 | 1980-12-17 | 800 |  | 20 |
| 7900 | JAMES | CLERK | 7698 | 1981-12-03 | 950 |  | 30 |
| 7844 | TURNER | SALESMAN | 7698 | 1981-09-08 | 1500 | 0 | 30 |
| 7698 | BLAKE | MANAGER | 7839 | 1981-05-01 | 2850 |  | 30 |
| 7654 | MARTIN | SALESMAN | 7698 | 1981-09-28 | 1250 | 1400 | 30 |
| 7521 | WARD | SALESMAN | 7698 | 1981-02-22 | 1250 | 500 | 30 |
| 7499 | ALLEN | SALESMAN | 7698 | 1981-02-20 | 1600 | 300 | 30 |

<질의6> 사원들의 정보를 상급자 사원번호 순으로 정렬해서 검색해라.

<SQL>

SELECT \*

FROM emp

ORDER BY mgr;

<결과>

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| EMPNO | ENAME | JOB | MGR | HIREDATE | SAL | COMM | DEPTNO |
| 7839 | KING | PRESIDENT |  | 1981-11-17 | 5000 |  | 10 |
| 7902 | FORD | ANALYST | 7566 | 1981-12-03 | 3000 |  | 20 |
| 7788 | SCOTT | ANALYST | 7566 | 1987-07-13 | 3000 |  | 20 |
| 7900 | JAMES | CLERK | 7698 | 1981-12-03 | 950 |  | 30 |
| 7844 | TURNER | SALESMAN | 7698 | 1981-09-08 | 1500 | 0 | 30 |
| 7654 | MARTIN | SALESMAN | 7698 | 1981-09-28 | 1250 | 1400 | 30 |
| 7521 | WARD | SALESMAN | 7698 | 1981-02-22 | 1250 | 500 | 30 |
| 7499 | ALLEN | SALESMAN | 7698 | 1981-02-20 | 1600 | 300 | 30 |
| 7934 | MILLER | CLERK | 7782 | 1982-01-23 | 1300 |  | 10 |
| 7876 | ADAMS | CLERK | 7788 | 1987-07-13 | 1100 |  | 20 |
| 7782 | CLARK | MANAGER | 7839 | 1981-06-09 | 2450 |  | 10 |
| 7698 | BLAKE | MANAGER | 7839 | 1981-05-01 | 2850 |  | 30 |
| 7566 | JONES | MANAGER | 7839 | 1981-04-02 | 2975 |  | 20 |
| 7369 | SMITH | CLERK | 7902 | 1980-12-17 | 800 |  | 20 |

<질의7> 커미션을 받는 사원의 정보를 급여, 사원번호, 사원이름 순으로 검색해라.

<SQL>

SELECT \*

FROM emp

WHERE comm > 0

ORDER BY sal, empno, ename;

<결과>

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| EMPNO | ENAME | JOB | MGR | HIREDATE | SAL | COMM | DEPTNO |
| 7521 | WARD | SALESMAN | 7698 | 1981-02-22 | 1250 | 500 | 30 |
| 7654 | MARTIN | SALESMAN | 7698 | 1981-09-28 | 1250 | 1400 | 30 |
| 7499 | ALLEN | SALESMAN | 7698 | 1981-02-20 | 1600 | 300 | 30 |

<질의8> 사원번호가 75로 시작하는 사원들의 사원이름, 급여, 커미션을 검색해라.

<SQL>

SELECT ename, sal, comm

FROM emp

WHERE empno like "75\*";

<결과>

|  |  |  |
| --- | --- | --- |
| ename | sal | comm |
| WARD | 1250 | 500 |
| JONES | 2975 |  |

<질의9> 부서번호별 사원들의 최저 급여을 부서번호 역순으로 검색해라.

<SQL>

SELECT deptno, min(sal)

FROM emp

GROUP BY deptno

ORDER BY 1 DESC;

<결과>

|  |  |
| --- | --- |
| deptno | Expr1001 |
| 30 | 950 |
| 20 | 800 |
| 10 | 1300 |

<질의10> ALLEN 사원이 근무 중인 부서이름과 지역을 검색해라.

<SQL>

SELECT dname, loc

FROM emp, dept

WHERE emp.deptno = dept.deptno

and ename = "allen";

<결과>

|  |  |
| --- | --- |
| dname | loc |
| SALES | CHICAGO |

<질의11> 급여가 1200 이상인 사원들의 사원명과 부서명을 검색해라.

<SQL>

SELECT ename, dname

FROM emp, dept

WHERE emp.deptno = dept.deptno

and sal >= 1200;

<결과>

|  |  |
| --- | --- |
| ename | dname |
| ALLEN | SALES |
| WARD | SALES |
| JONES | RESEARCH |
| MARTIN | SALES |
| BLAKE | SALES |
| CLARK | ACCOUNTING |
| SCOTT | RESEARCH |
| KING | ACCOUNTING |
| TURNER | SALES |
| FORD | RESEARCH |
| MILLER | ACCOUNTING |

<질의12> CLERK 직무자의 사원번호, 이름, 근무 지역을 검색하라.

<SQL>

SELECT empno, ename, loc

FROM emp, dept

WHERE emp.deptno = dept.deptno

and job = "clerk";

<결과>

|  |  |  |
| --- | --- | --- |
| empno | ename | loc |
| 7369 | SMITH | DALLAS |
| 7876 | ADAMS | DALLAS |
| 7900 | JAMES | CHICAGO |
| 7934 | MILLER | NEW YORK |

<질의13> SALESMAN 직무자의 사원번호, 이름, 근무 지역을 검색하라.

<SQL>

SELECT empno, ename, loc

FROM emp, dept

WHERE emp.deptno = dept.deptno

and job = "salesman";

<결과>

|  |  |  |
| --- | --- | --- |
| empno | ename | loc |
| 7499 | ALLEN | CHICAGO |
| 7521 | WARD | CHICAGO |
| 7654 | MARTIN | CHICAGO |
| 7844 | TURNER | CHICAGO |

<질의14> 직무별 사원들의 인원수를 구하라.

<SQL>

SELECT job, count(\*)

FROM emp

GROUP BY job;

<결과>

|  |  |
| --- | --- |
| job | Expr1001 |
| ANALYST | 2 |
| CLERK | 4 |
| MANAGER | 3 |
| PRESIDENT | 1 |
| SALESMAN | 4 |

<질의15> SALES나 RESEARCH 부서에 근무하는 사원들의 부서별 직무별 인원수를 지역과 함께 구하라.

<SQL>

SELECT dname, loc, count(\*)

FROM emp, dept

WHERE emp.deptno = dept.deptno

and dname in ("sales","RESEARCH")

GROUP BY dname, loc;

<결과>

|  |  |  |
| --- | --- | --- |
| dname | loc | Expr1002 |
| RESEARCH | DALLAS | 5 |
| SALES | CHICAGO | 6 |

<질의16> CHICAGO이나 DALLAS 지역에 근무하는 사원들의사원번호와 사원이름을 사원번호순으로 검색하라.

<SQL>

SELECT empno, ename

FROM emp, dept

WHERE emp.deptno = dept.deptno

and loc in ("CHICAGO","DALLAS")

ORDER BY empno;

<결과>

|  |  |
| --- | --- |
| empno | ename |
| 7369 | SMITH |
| 7499 | ALLEN |
| 7521 | WARD |
| 7566 | JONES |
| 7654 | MARTIN |
| 7698 | BLAKE |
| 7788 | SCOTT |
| 7844 | TURNER |
| 7876 | ADAMS |
| 7900 | JAMES |
| 7902 | FORD |

<질의17> 'JAMES'사원의 같은 직무를 가진 사원의 정보를 검색해라.

<SQL>

SELECT \*

FROM emp

WHERE job = (select job

from emp

where ename = "james")

and ename <> "james";

<결과>

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| EMPNO | ENAME | JOB | MGR | HIREDATE | SAL | COMM | DEPTNO |
| 7369 | SMITH | CLERK | 7902 | 1980-12-17 | 800 |  | 20 |
| 7876 | ADAMS | CLERK | 7788 | 1987-07-13 | 1100 |  | 20 |
| 7934 | MILLER | CLERK | 7782 | 1982-01-23 | 1300 |  | 10 |

<질의18> 상급자 사원번호가 CLARK의 상급자 사원번호와 같은 사원의 사원번호와 이름을 구하여라.

<SQL>

SELECT empno, ename

FROM emp

WHERE mgr = (select mgr

from emp

where ename = "clark");

<결과>

|  |  |
| --- | --- |
| empno | ename |
| 7566 | JONES |
| 7698 | BLAKE |

<질의19> 직무가 'ALLEN'과 같은 사원의 사원의 사원번호와 사원이름, 급여를 급여순으로 검색해라.

<SQL>

SELECT empno, ename, sal

FROM emp

WHERE job = (select job

from emp

where ename = "allen")

and ename <> "allen"

and ename <> "clark";

ORDER BY sal;

<결과>

|  |  |  |
| --- | --- | --- |
| empno | ename | sal |
| 7654 | MARTIN | 1250 |
| 7521 | WARD | 1250 |
| 7844 | TURNER | 1500 |

<질의20> SCOTT'사원보다 급여가 높은 사원의 사원번호와 이름, 급여를 검색해라.

<SQL>

SELECT empno, ename, sal

FROM emp

WHERE sal > (select sal

from emp

where ename = "scott");

<결과>

|  |  |  |
| --- | --- | --- |
| empno | ename | sal |
| 7839 | KING | 5000 |