**---CZ 1**

/\*1\*/

SELECT empno, ename, mgr FROM emp;

/\*2\*/

SELECT \* FROM emp;

/\*3\*/

SELECT 12\*sal FROM emp;

/\*4\*/

SELECT 12\*(sal+250) FROM emp;

/\*5\*/

SELECT 12\*(sal+250) "Roczna" FROM emp;

/\*6\*/

SELECT 12\*(sal+250) "Placa Roczna" FROM emp;

/\*7\*/

SELECT mgr || ename "Zatrudniony" from emp;

/\*8\*/

SELECT 'Pracownik' || mgr || ename || ' pracuje w dziale nr' || deptno "Informacje o pracwnikach" FROM emp;

/\*9\*/

SELECT 12\*sal + NVL(comm, 0) FROM emp;

/\*10\*/

SELECT deptno FROM emp;

/\*11\*/

SELECT DISTINCT (deptno) FROM emp;

/\*12\*/

SELECT DISTINCT (deptno || job) FROM emp;

/\*13\*/

SELECT \* FROM emp ORDER BY ename;

/\*14\*/

SELECT \* FROM emp ORDER BY hiredate desc;

/\*15\*/

SELECT \* FROM emp ORDER BY deptno , Sal desc;

**---CZ 2**

/\*1\*/

SELECT ename, empno, deptno, job, sal FROM emp WHERE job = 'CLERK';

/\*2\*/

SELECT ename, deptno FROM emp WHERE deptno > 20;

/\*3\*/

Select empno, ename FROM emp WHERE comm > sal;

/\*4\*/

SELECT \* FROM emp where sal > 1000 AND sal < 2000;

/\*5\*/

SELECT \* FROM emp WHERE MGR = 7092 OR MGR = 7566 OR MGR =7788;

/\*6\*/

SELECT \* FROM emp WHERE ename LIKE 'S%';

/\*7\*/

SELECT \* FROM emp WHERE ename LIKE '\_\_\_\_';

/\*8\*/

select \* from emp WHERE MGR = null;

/\*9\*/

SELECT empno, ename, sal FROM emp where sal < 1000 OR sal > 2000;

/\*10\*/

SELECT empno, ename, deptno FROM emp WHERE ename NOT LIKE 'M%';

/\*11\*/

SELECT ename FROM emp WHERE mgr IS NOT NULL;

/\*12\*/

SELECT ename, empno, sal, job FROM emp where job = 'CLERK' AND sal > 1000 AND sal < 2000;

/\*13\*/

SELECT ename, empno, sal, job FROM emp WHERE job = 'CLERK' AND (sal < 1000 OR sal > 2000);

/\*14\*/

SELECT ename, empno, job FROM emp WHERE (job = 'MANAGER'AND sal > 1500) or job = 'SALESMAN'

/\*15\*/

SELECT ename, empno, job FROM emp WHERE (job = 'MANAGER'or job = 'SALESMAN') AND sal > 1500;

/\*16\*/

SELECT ename, job, deptno FROM emp WHERE job = 'MANAGER' OR (job ='CLERK' AND deptno = 10);

/\*17\*/

SELECT \* from SALGRADE;

/\*18\*/

SELECT \* FROM DEPT;

/\*19\*/

SELECT \* FROM emp WHERE 12\*SAL+NVL(COMM,0)<12000 OR 12\*SAL+NVL(COMM,0)>24000;

/\*20\*/

SELECT empno, job, deptno FROM emp ORDER BY deptno, job;

/\*21\*/

SELECT DISTINCT job FROM emp;

/\*22\*/

SELECT \* FROM emp WHERE deptno = 10 OR deptno = 20 ORDER BY ename;

/\*23\*/

SELECT ename, job FROM emp where deptno = 20 and job = 'CLERK';

/\*24\*/

SELECT \* from emp where ename LIKE '%TH%' OR ename LIKE '%LL%';

/\*25\*/

SELECT ename, job, sal from emp where mgr is not null;

/\*26\*/

SELECT ename, 12\*SAL+NVL(comm,0) "Placa roczna" FROM emp;

/\*27\*/

SELECT ename, deptno, hiredate from emp where hiredate LIKE '%-%-82';

SELECT ename, deptno, hiredate FROM emp WHERE EXTRACT(year from to\_date(hiredate, 'yyyy/mm/dd')) = 82;

/\*28\*/

SELECT ename, 12\*SAL+NVL(comm,0) "Placa roczna", comm FROM emp where job = 'SALESMAN' AND sal > comm ORDER BY sal DESC,ename;

**---CZ 3**

/\*1\*/

SELECT \* FROM EMP, DEPT;

/\*2\*/

SELECT \* FROM emp, dept WHERE emp.deptno = dept.deptno(+);

/\*3\*/

SELECT ename, deptno, dname, loc FROM emp LEFT JOIN dept USING(Deptno);

/\*4\*/

SELECT ename, dname, loc from emp JOIN dept USING (deptno) WHERE sal > 1500;

/\*5\*/

SELECT ename, job, sal, grade FROM emp, salgrade WHERE sal BETWEEN Losal AND Hisal ORDER BY grade DESC, ename ASC;

/\*6\*/

SELECT ename, sal, job FROM emp INNER JOIN Salgrade ON Sal BETWEEN Losal AND Hisal WHERE Grade=3;

/\*7\*/

SELECT ename, job from EMP JOIN dept USING(deptno) WHERE loc = 'DALLAS';

/\*8\*/

SELECT ename, deptno, dname, loc FROM emp JOIN dept USING(deptno) WHERE deptno = 30 OR deptno = 40;

SELECT \* FROM dept WHERE deptno = 40;

/\*9\*/

SELECT ename, dname, loc FROM emp, dept WHERE emp.deptno = dept.deptno(+);

/\*10\*/

SELECT ename, dname FROM emp FULL OUTER JOIN dept USING(deptno);

/\*11\*/

SELECT pracownik.ename FROM emp pracownik, emp kierownik

WHERE pracownik.mgr = kierownik.empno AND pracownik.sal < kierownik.sal;

/\*12\*/

SELECT pracownik.ename, pracownik.sal, kierownik.ename, kierownik.sal

FROM emp pracownik, emp kierownik WHERE pracownik.mgr = kierownik.empno

AND pracownik.sal < kierownik.sal;

/\*13\*/

SELECT job FROM emp WHERE deptno = 30

--UNION

--MINUS

INTERSECT

SELECT job FROM emp WHERE deptno = 10;

/\*14\*/

SELECT job FROM emp WHERE deptno = 30

UNION ALL

SELECT job FROM emp WHERE deptno = 10;

/\*15\*/

SELECT job FROM emp WHERE deptno = 10

MINUS

SELECT job FROM emp WHERE deptno = 30;

**---CZ 4**

/\*1\*/

SELECT AVG(sal) "srednia placa" FROM emp;

/\*2\*/

SELECT MIN(sal) "minimalna placa" FROM emp WHERE job = 'CLERK';

/\*3\*/

SELECT COUNT(ename) "ilosc pracownikow" FROM emp;

/\*4\*/

SELECT job, aAVG(sal) "srednia placa" FROM emp GROUP BY job;

/\*5\*/

SELECT job, avg(sal) "srednia placa" FROM emp WHERE NOT job = 'MANAGER' GROUP BY job;

/\*6\*/

SELECT deptno, job, avg(sal) "srednia placa" FROM emp WHERE NOT job='MANAGER' GROUP BY deptno, job;

/\*7\*/

SELECT job, MAX(sal) "max placa" FROM emp GROUP BY job;

/\*8\*/

SELECT deptno, AVG(sal) FROM emp GROUP BY deptno HAVING COUN(\*) > 3;

/\*9\*/

SELECT job, AVG(sal) "Zarobek" FROM emp GROUP BY job HAVING AVG(sal) >= 3000;

/\*10\*/

SELECT job, AVG(sal) "Miesieczne", avg(sal\*12 + NVL(comm, 0)) "Roczne" FROM emp GROUP BY job;

/\*11\*/

SELECT dname, count(e.deptno) "Ilosc pracownikow" FROM dept d INNER JOIN emp e ON d.deptno = e.deptno GROUP BY dname HAVING COUNT(e.deptno) > 3;

/\*12\*/

SELECT empno, COUNT(1) FROM emp group by empno HAVING COUNT(1) > 1;

/\*13\*/

SELECT mgr, min(sal) FROM emp GROUP BY mgr HAVING MIN(sal) > 1000 ORDER BY MIN(sal) desc;

/\*14\*/

SELECT loc, count(e.deptno) "Ilosc pracownikow" FROM dept d INNER JOIN emp e ON d.deptno = e.deptno WHERE loc = 'DALLAS' GROUP BY loc;

/\*15\*/

SELECT grade, max(sal) FROM salgrade s inner join emp e on e.sal between s.losal and s.hisal GROUP BY grade;

/\*16\*/

SELECT sal, count(\*) FROM emp group by sal having count(\*)>1;

/\*17\*/

SELECT grade, avg(sal) FROM salgrade s INNER JOIN emp e ON e.sal between s.losal and s.hisal WHERE grade = 2 GROUP BY grade;

/\*18\*/

SELECT e.ename, count(m.mgr) FROM emp e join emp m on e.empno = m.mgr GROUP BY e.ename;

/\*19\*/

SELECT grade, sum(sal) FROM salgrade s INNER JOIN emp e ON e.sal BETWEEN s.losal AND s.hisal WHERE grade = 1 GROUP BY grade;

**---CZ 5**

/\*1\*/

SELECT ename, sal FROM emp WHERE sal = (SELECT MIN(sal) FROM emp);

/\*2\*/

SELECT ename, sal, deptno FROM emp WHERE job = (SELECT job FROM emp WHERE ename = 'BLAKE');

/\*3\*/

SELECT ename, sal, deptno FROM emp WHERE job = (SELECT job FROM emp WHERE ename = 'BLAKE') MINUS (SELECT ename, sal, empno FROM emp WHERE enamee = 'BLAKE');

/\*4\*/

SELECT ename, sal, deptno FROM EMP a WHERE sal = (SELECT MIN(sal) FROM emp b WHERE a.deptno = b.deptno);

/\*5\*/

SELECT ename, sal, deptno FROM emp WHERE (sal, deptno) IN (SELECT MIN(sal), deptno FROM emp GROUP BY deptno);

/\*6\*/

SELECT ename, sal, deptno FROM EMP WHERE sal > ANY (SELECT MIN(sal) FROM emp WHERE deptno = 30);

/\*7\*/

SELECT ename, sal, deptno FROM EMP WHERE sal > ALL (SELECT MAX(sal) FROM emp WHERE deptno = 30);

/\*8\*/

SELECT deptno FROM emp GROUP BY deptno HAVING AVG(sal) > (SELECT AVG(sal) FROM emp WHERE deptno = 30);

/\*9\*/

SELECT e.deptno, dname, loc, AVG(sal) FROM emp e JOIN dept d ON e.deptno = d.deptno GROUP BY e.deptno, dname, loc HAVING AVG(sal) > (SELECT AVG(sal) FROM emp WHERE deptno = 30);

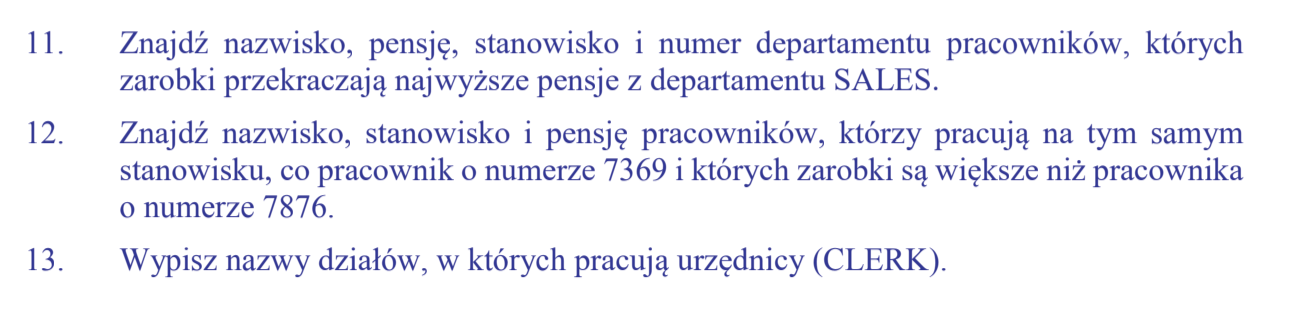
/\*10\*/

SELECT job FROM emp GROUP BY job HAVING AVG(sal) = (SELECT MAX(AVG(sal)) FROM emp GROUP BY job);

/\*11\*/

/\*12\*/

/\*13\*/



**---CZ 6**

-- Pracownicy zarabiajacy najmniej w swoich dzialach;

SELECT ename, job, sal, deptno

FROM emp e1

WHERE sal = (SELECT Min(sal) FROM emp e2 WHERE e1.deptno = e2.deptno);

-- to samo zadanie zrealizowane bez korelacji, ale z porownaniem list wartosc

SELECT ename, job, sal, deptno

FROM emp e1

WHERE (sal, deptno) = (SELECT Min(sal), deptno

FROM emp

GROUP BY deptno);

/\*1\*/

SELECT ename, job, sal, deptno

FROM emp e1

WHERE sal = (SELECT Max(sal) FROM emp e2 WHERE e1.deptno = e2.deptno);

/\*2\*/

SELECT ename, job, sal, deptno

FROM emp e1

WHERE sal > (SELECT AVG(sal) FROM emp e2 WHERE e1.deptno = e2.deptno);

/\*3\*/

SELECT ename, job, sal, deptno

FROM emp e1

WHERE sal = (SELECT Min(sal) FROM emp e2 WHERE e1.job = e2.job);

/\*4\*/

SELECT ename

FROM emp e1

WHERE EXISTS (SELECT 1 FROM emp e2 WHERE e1.empno = e2.mgr);

/\*5\*/

SELECT ename

FROM emp e1

WHERE NOT EXISTS (SELECT 1 FROM dept d1 WHERE e1.deptno = d1.deptno);

/\*6\*/

SELECT dname, loc

FROM dept

WHERE NOT EXISTS (SELECT 1 FROM emp WHERE emp.deptno = dept.deptno);

/\*7\*/

SELECT ename, sal, job

FROM emp e1

WHERE sal = (SELECT Max(sal) FROM emp e2 WHERE e1.job = job )

ORDER BY sal DESC;

/\*8\*/

SELECT ename, sal, grade

FROM emp e1 JOIN salgrade s1 ON e1.sal BETWEEN s1.losal AND s1.hisal

WHERE e1.sal = (SELECT Min(e2.sal)

FROM emp e2 JOIN salgrade s2 ON e2.sal BETWEEN s2.losal AND s2.hisal

WHERE s1.grade = s2.grade)

ORDER BY sal DESC;

/\*9\*/

SELECT dname, loc, ename, hiredate

FROM dept d1

INNER JOIN emp e1 ON d1.deptno = e1.deptno

WHERE hiredate = (SELECT MAX(hiredate) FROM emp e2

INNER JOIN dept d2 ON e2.deptno = d2.deptno

WHERE d1.deptno = d2.deptno);

/\*10\*/

SELECT ename, sal, dname, grade

FROM emp e1 JOIN dept ON e1.deptno = dept.deptno

JOIN salgrade s1 ON e1.sal BETWEEN s1.losal AND s1.hisal

WHERE e1.sal > (SELECT AVG(e2.sal) FROM emp e2

JOIN salgrade s2 ON e2.sal BETWEEN s2.losal AND s2.hisal

WHERE s1.grade = s2.grade);

/\*11\*/

SELECT ename

FROM emp

WHERE NOT EXISTS (SELECT 1 FROM dept

WHERE emp.deptno = dept.deptno);

/\*12\*/

SELECT ename, sal

FROM emp e1

WHERE 3 > (SELECT Count (1) FROM emp e2

WHERE e1.sal < e2.sal);

/\*13\*/

SELECT ename, sal

FROM emp e1

WHERE 3 > (SELECT Count(DISTINCT sal)

FROM EMP e2

WHERE e1.sal < e2.sal);

/\*14\*/

/\* brzydko \*/

SELECT ename, sal, emp.deptno, Trunc(X.Avsal, 2)

FROM emp JOIN (SELECT AVG(sal) Avsal, deptno FROM emp

GROUP BY deptno) X ON emp.deptno = X.deptno

WHERE sal > Avsal;

/\* lepiej \*/

WITH X (Avsal, dno)

AS

(SELECT AVG (sal) Avsal, deptno FROM emp GROUP BY deptno)

SELECT ename, sal, emp.deptno, Trunc (X.Avsal,2)

FROM emp JOIN X ON deptno = dno

WHERE sal > Avsal;

/\*15\*/

SELECT ename, hiredate, ' \* ' Maxdate

FROM emp

WHERE hiredate = (SELECT Max(hiredate)

FROM emp)

UNION

SELECT ename, hiredate, ' ' Maxdate

FROM emp

WHERE hiredate != (SELECT Max(hiredate)

FROM emp);