

See compulsory exercise for practice 5 in db1_exercise5b.pdf

Exercises (SQL and relational algebra)

```
NIKOVITS.EMP (empno, ename, job, mgr, hiredate, sal, comm, deptno)
NIKOVITS.DEPT(deptno, dname, loc)
NIKOVITS.SAL_CAT(category, lowest_sal, highest_sal)
NIKOVITS.LIKES(name, fruits)
```

Upload the data into Relax from the following file: Relax_4Tables.txt

1.

List the department number, department name and location for the departments having an employee with salary category 1. (**deptno, dname, loc**)

2.

List the department number, department name and location for the departments **having no** employee with salary category 1. (**deptno, dname, loc**)

3.

List the department number, department name and location for the departments **having at least two employees** with salary category 1. (**deptno, dname, loc**)

4.

List the employees who have maximal salary within their own department. Give the department number, employee name and salary for them. (**deptno, ename, sal**)

5.

List the jobs where this job occurs only on one department and give the name of this department too. (**job, dname**)

6.

Give the names who like every fruit. (**name**) (see Likes(name, fruits) relation)

7.

Give the salary and salary category of the employees who have the lowest salary among the employees having a subordinate. (**sal, category**)

8. (only SQL because relational algebra does not have built in functions)

Give the month names (January, February etc.) in which at least two employees started to work (hiredate shows the start of work) and give the number of such employees by month. (**Month_name, Num_emps**)