

Basic Databases – Report07

Wroclaw University of Science and Technology, Date: May 31, 2021

Exercise

1. Prepare the queries according to given instructions

a) .

with recursive dept_hierarchy

(dept_no,org_no,level)

as (

select dept_no,org_no,1

from dept_org

where org_no = ""

union all

select c.dept_no,d.org_no,d.level+1

from dept_org c,dept_hierarchy d

where c.org_no = d.dept_no

)select dept_no,level from dept_hierarchy

order by level;

b) .

WITH RECURSIVE dept_org_lvl (dept_no, org_no ,lvl) AS

(

SELECT dept_no,org_no, 1 lvl

FROM dept_org

WHERE org_no = ""

UNION ALL

SELECT d.dept_no,d.org_no,dl.lvl + 1

FROM dept_org_lvl AS dl JOIN dept_org AS d

```

ON dl.dept_no = d.org_no

)

Select dl.dept_no as "Department No", dl.lvl as "Level", count(de.emp_no) as "Number of
employees"

from dept_org_lvl as dl left join dept_emp as de

on dl.dept_no = de.dept_no

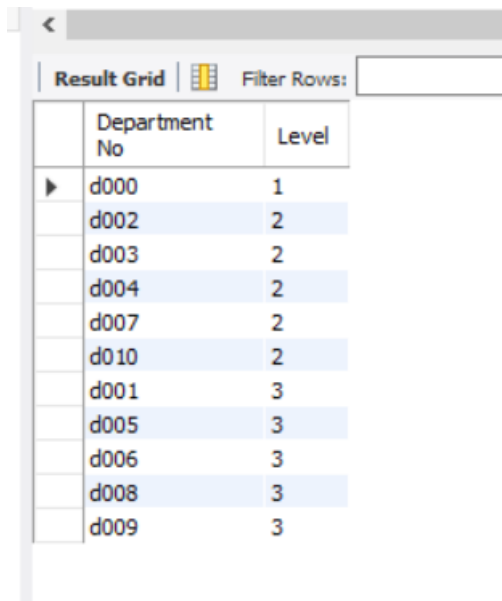
group by dl.dept_no

order by dl.lvl;

```

Recommended results:


a)



The screenshot shows a database query result grid with two columns: 'Department No' and 'Level'. The results are ordered by level, with level 1 having one row (d000), level 2 having six rows (d002, d003, d004, d007, d010, d001), and level 3 having six rows (d005, d006, d008, d009, d001, d005). The rows are displayed in a light blue alternating background color.

Department No	Level
d000	1
d002	2
d003	2
d004	2
d007	2
d010	2
d001	3
d005	3
d006	3
d008	3
d009	3

b)

Result Grid			
		Filter Rows:	<input type="text"/>
		Export: 	
	Department No	Level	Number of Employees
▶	d000	1	0
	d002	2	17346
	d003	2	17786
	d004	2	73485
	d007	2	52245
	d010	2	0
	d001	3	20211
	d005	3	85707
	d006	3	20117
	d008	3	21126
	d009	3	23580

Remarks:

1. The rule of naming a student's file report is defined below

Name of the file: Rep07-StudId-Last name.pdf	Example: Rep07-1951355-Turan.pdf
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