University of West Attica
Department of Informatics and Computer Engineering

Databases I

Task 3: Sorting and GROUP BY and HAVING subclauses. Connections (JOIN).

Create base new_personnel

Create the new_personnel database (if you haven't already created it in the previous tasks) with the following tables and their data, as shown here:

DEPT

DEPTNO	DNAME	LOC
10	ACCOUNTING	ATHENS
20	SALES	LONDON
30	RESEARCH	ATHENS
40	PAYROLL	LONDON

EMP

EMPNO	ENAME	JOB	HIREDATE	MGR	SAL	COMM	DEPTNO
10	CODD	ANALYST	1/1/89	15	3000		10
15	ELMASRI	ANALYST	2/5/95	15	1200	150	10
20	NAVATHE	SALESMAN	7/7/77	20	2000		20
30	DATE	PROGRAMMER	4/5/04	15	1800	200	10

PROJ

PROJ_CODE	DESCRIPTION
100	PAYROLL
200	PERSONNEL
300	SALES

ASSIGN

EMPNO	PROJ_CODE	A_TIME
10	100	40
10	200	60
15	100	100
20	200	100
30	100	100

Questions

Identify and write a query for each of the following queries:

1. Locate the statement that will display the employees (ENAME,DEPTNO) who work in department 10, sorted by their commission

2. Locate the statement that will display the employees (ENAME,JOB,SAL) sorted by position (ascending order) and by their salary (descending order)

3. Locate the statement to display the average salary per department when the employees are at least 1.

4. Locate the statement to display the average time of employment (in years) by department (Table 1)

ΤΜΗΜΑ	ΠΡΟΫΠΗΡΕΣΙΑ (έτη)
10	24.0
20	42.8

Table 1

5. Locate the statement that will display projects (PNAME), employed employees (ENAME), and their positions (JOB), sorted by project and by position.

6. Locate the statement that will display all employees against their supervisors (Table 2). Results should be sorted by department name and employee name

Department	Manager	Employee
ACCOUNTING	ELMASRI	CODD
ACCOUNTING	ELMASRI	ELMASRI
ACCOUNTING	ELMASRI	DATE
RESEARCH	NAVATHE	NAVATHE

Table 2

7. Locate the statement that will display the names of the employees, their position and the location (loc) of the employees in the department "RESEARCH" (Table 3).

Ename	Job	Loc
NAVATHE	SALESMAN	DALLAS

Table 3

8. Locate the statement that will display the names of employees participating in the "PAYROLL" project and working more than 50 hours (PTIME) for this project.

Note: For question (4) consult the presentation of the laboratory exercise LAB_05. For questions (5) and (8) you will have to join three tables. For question (6) you will need to treat the EMP array as two arrays with the help of alias (Presentation LAB_06) and implement a self-join between EMP and EMP. For question (7) you should make a join between two tables.

The commands with which the 8 questions are answered and the results of their execution, to be written in a text file (e.g. in notepad++ or alternatively in a doc file).

Compress the above file(s) into a zip file, name it *AM_LastName*, (eg 12345_Christos_Christou.zip) and submit it.

The submission will be made in the corresponding area of the course in the e-class, in the **Assignments** option .