



# University of West Attica

## Department of Informatics and Computer Engineering

## Databases I

**Task 2:** Create and manage a personnel database using simple and complex SQL statements. Subqueries in the SQL language.

### Create base new\_personnel

Create the new\_personnel database (if you haven't already created it in task 1 ) 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. Find the statement that will result in the following table (Table 1).

ENAME	ΜΙΣΘΟΣ	ΠΡΟΜΗΘΕΙΑ	ΠΟΣΟΣΤΟ
CODD	3,000 €		0.00 %
ELMASRI	1,200 €	150.00	12.50 %
NAVATHE	2,000 €		0.00 %
DATE	1,800 €	200.00	11.11 %

Πίνακας 1

2. Locate the statement that will show the monthly earnings, years of work and names of employees who have worked for the company for more than 20 years (Table 2)

ΕΠΩΝΥΜΟ	ΜΗΝΙΑΙΕΣ ΑΠΟΔΟΧΕΣ	ΠΡΟΫΠΗΡΕΣΙΑ
CODD	3,000 €	31 έτη
ELMASRI	1,350 €	25 έτη
NAVATHE	2,000 €	43 έτη

Πίνακας 2

3. Locate the statement that will display the name, position, and hire date of employees who have an ANALYST position or SALESMAN and their recruitment took place in the first 5 days of the month (Table 3).

ΕΠΩΝΥΜΟ	ΘΕΣΗ	ΠΡΟΣΛΗΨΗ
CODD	ANALYST	1989-01-01
ELMASRI	ANALYST	1995-05-02

Πίνακας 3

4. Locate the statement that will display the names of employees who work in the same position as a department employee ACCOUNTING.
5. Locate the statement to display the names of employees and their total monthly earnings for those with the highest total earnings in their department.
6. Locate the statement that will display the names and salaries of employees who belong to the department named ACCOUNTING and have a salary less than the department's maximum employee salary RESEARCH.

**Note:** For questions (1) and (2), you will need the concat(), format() and ifnull() functions. The general syntax of the format() function is format(number, decimal\_places). For question (3) you will need the substring() and convert() functions. The general syntax of the substring() function is SUBSTRING(string, start, length) and of convert() is CONVERT(value, type).

The commands with which the 6 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 .