University of West Attica κής

Department of Informatics and Computer Engineering

Databases I ων I

Task 1: Create and manage a database, create a database model

Create base new_personnel

Create the new_personnel database, 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

Commands via command line mode

1. **Record the commands to create the DB, the tables and the data entry commands, as well as all the commands required to verify their execution (select, describe, etc.)**

2. **Capture the image of your tables as they appear on base (structure and data)**

Using the MySQL Workbench software

3. **Use the MySQL Workbench software to build the model (Entity-Relationship diagram) for the new_personnel database. Save the model through the application to an image type file (model_01.png).**

4. **Then through the MySQL Workbench software, make the following changes to the model (Entity-Relationship diagram) of the new_personnel database:**

    i. Create a new field in the EMP entity named ADDRESS and type VARCHAR maximum number of characters 50.

    ii. Change the LOC field of the DEPT entity to a maximum number VARCHAR 30 characters.

    iii. Create a new TASK entity with fields TASK_CODE of type INT, DESCRIPTION of type VARCHAR with a maximum number of 20 characters.

    iv. Create a 1:N relationship between TASK and PROJ (with auto creating a PROJ_CODE field of type INT in the TASK entity).

5. **Then save the modified model through the application to an image type file (model_02.png).**

The commands for questions 1 and 2 and the results of their execution, to be written in a text file (e.g. in notepad++ or alternatively in a doc file). The results of executing queries 3 through 5 are the output of the files model_01.png and model_02.png.

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

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