Database Systems

Database Administration
Session # 4

Objectives

1) Learning how to manage database memory.

2) Learning how to manage database storage.

3) Learning how to manage users and security.

References

[1]   http://dev.mysql.com/doc/refman/5.7/en/

Reading

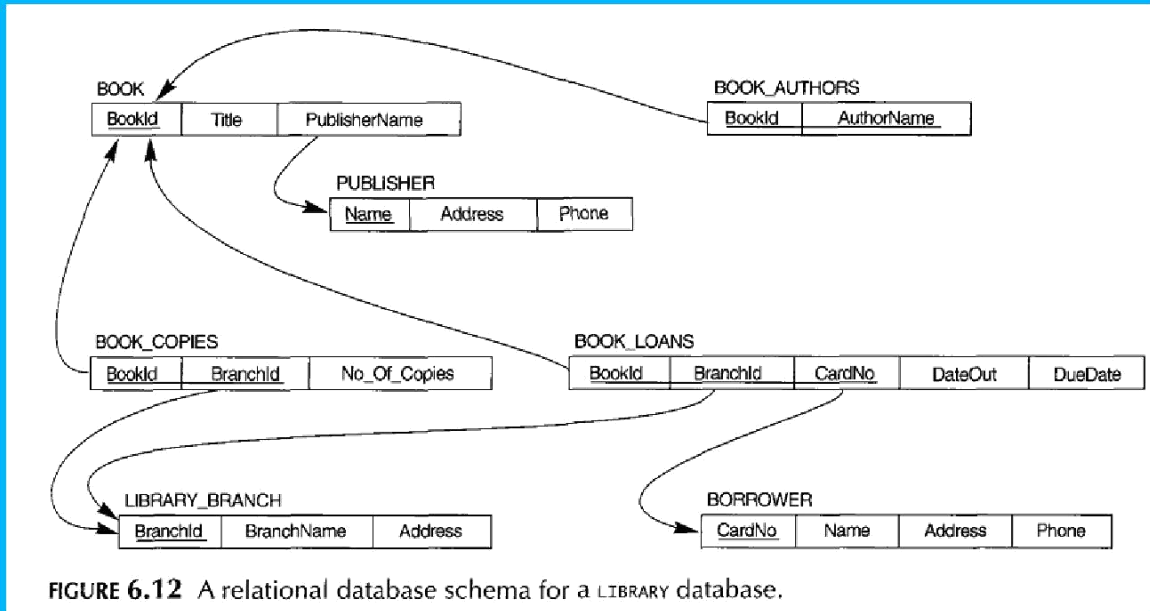 https://www.mysql.com/products/workbench/admin/

 Administration Statements

 Establishing a Network and Testing the Connection

Lab Session

- From the cmd prompt or the workbench, connect to the database generated in **lab session 3** (as shown in the schema figure below) using the default root with root as password system administrative privileges.

- Using the SQL Developer, create a new user account called *SAMPLE* and grant it as DBA. Also, unlock the default *HR* user account.

- Write a simple program or use an offline tool, to insert about 200, 000 records or more for each table. Using the *SAMPLE* account, report the storage details about: **data files**, **free space**, **offline table spaces**, **table space quotas**, and **table space segments** before and after the insertion.

- Compact the database tables storage, and report whether it recovered the unused spaces or not.

- Use the *HR* account to establish a local network between your database host machine, and another machine that will be a database client. Then, configure the network environment between the two machines and connect from the client machine to the database on the host one.

- Select the publishers that have phone numbers ended with '39' and show this result.

- Expire the password of the *HR* account and drop the *SAMPLE* one.

- Shut down and disconnect the database on the host machine from the cmd prompt.

Schema figure

FIGURE 6.12 A relational database schema for a LIBRARY database.

Good Luck