

《数据库原理与设计》实验报告

年级、专业、班级	2024 级软件工程 01		姓名	
实验题目	实验 2 数据库基本操作			
实验时间	2024/9/20	实验地点	DS1501	
实验成绩		实验性质	<input checked="" type="checkbox"/> 验证性 <input type="checkbox"/> 设计性 <input type="checkbox"/> 综合性	
教师评价： <input type="checkbox"/> 算法/实验过程正确; <input type="checkbox"/> 源程序/实验内容提交 <input type="checkbox"/> 程序结构/实验步骤合理; <input type="checkbox"/> 实验结果正确; <input type="checkbox"/> 语法、语义正确; <input type="checkbox"/> 报告规范; 其他： 评价教师签名：				
一、实验目的 [1] 理解数据库的概念和特点; [2] 掌握创建数据库的方法; [3] 掌握数据库属性的查看和修改方法; [4] 理解数据库备份的重要性; [5] 掌握数据库备份和恢复的方法; [6] 掌握数据库删除的方法。				
二、实验项目内容 针对数据库 Library (表结构和内容如附录) 进行下面的实验： 1. 使用 MySQL Workbench 创建数据库 library，并查看数据库的属性信息。 2. 使用 SQL 创建数据库 library_1，并将 SQL 语句保存为脚本文件。 3. 使用 MySQL Workbench 备份数据库 library。 4. 使用 mysqldump 备份 library_1 数据库。 5. 使用 MySQL Workbench 恢复数据库 library。 6. 在命令提示符窗口恢复 library_1 数据库。 7. 使用 SQL 删除数据库 library_1。				
三、实验过程或算法（源程序） 2.create database library_1 7.drop database library_1				

报告创建时间：

四、实验结果及分析和（或）源程序调试过程

1. 创建

The screenshot shows the MySQL Workbench interface. On the left, the 'SCHEMAS' tree view is open, showing the 'library' database selected. The 'library' database node has several child nodes: Tables, Views, Stored Procedures, and Functions. Other databases listed are library_2, sales, sys, and test1. On the right, the 'Info' tab is selected in the top navigation bar. Below it, the title 'Local instance MySQL80' and the database name 'library' are displayed. Under the 'Schema Details' section, the following information is shown:

Default collation:	utf8mb4_0900_ai_ci
Default characterset:	utf8mb4
Table count:	0
Database size (rough estimate):	0.0 bytes

2. 创建 (sql)

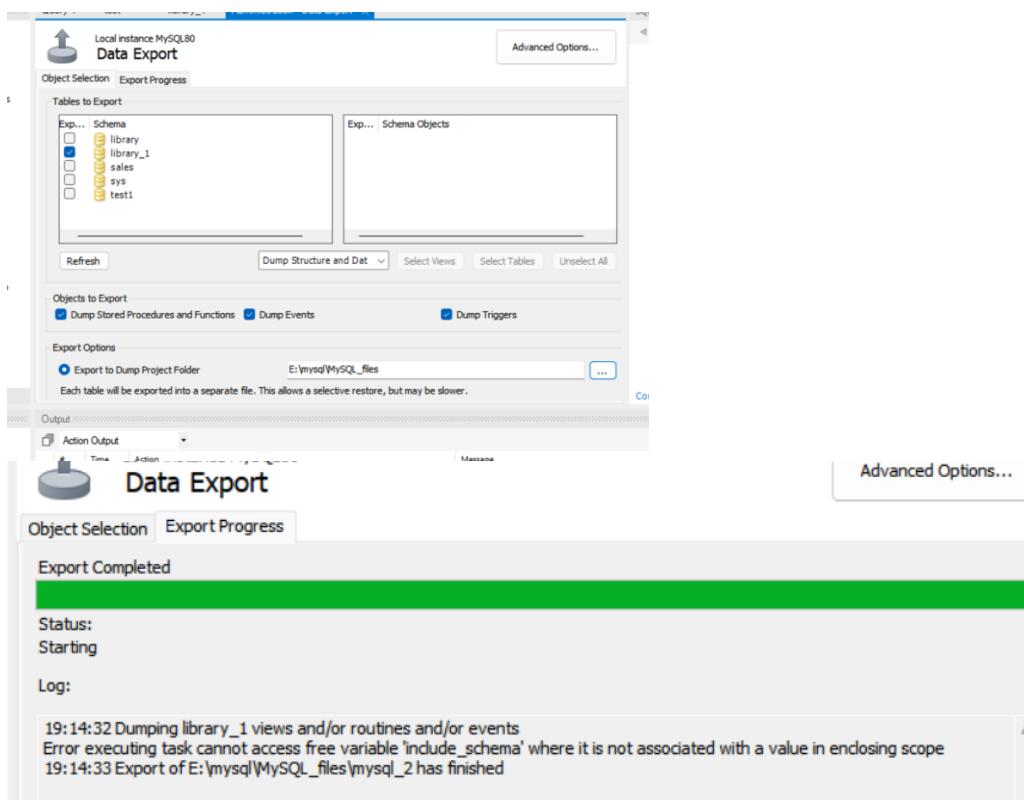
The screenshot shows the MySQL Workbench SQL editor. The SQL code entered is:

```
1 •  create database library1;
2
```

A tooltip message on the right side of the editor states: "Automatic context help is disabled. Use the toolbar or manually get help for the current caret position or toggle automatic help." In the bottom left corner, there is an "Output" tab with the "Action Output" sub-tab selected. The output log shows the following entries:

#	Time	Action	Message	Duration / Fetch
1	19:57:11	create database library_1	Error Code: 1007. Can't create database 'library_1'; database exists	0.000 sec
2	19:57:21	drop database library_1	0 row(s) affected	0.031 sec
3	19:58:58	create database library1	1 row(s) affected	0.016 sec

3. 备份：



4. 使用 mysqldump 备份

Microsoft Windows [版本 10.0.22621.4169]
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```
:\\Windows\\System32>cd E:\\mysql\\MySQL\\MySQL Server 8.0\\bin  
:\\Windows\\System32>E:  
:\\mysql\\MySQL\\MySQL Server 8.0\\bin>mysqldump -u root -p sales>E:\\mysql\\bak\\library_1_bak.sql  
Enter password: *****
```

5. 恢复 (workbench)

Data Import

Import from Disk Import Progress

Import Options

Import from Dump Project Folder C:\Users\HP\Documents\dumps ...
Select the Dump Project Folder to import. You can do a selective restore.
Load Folder Contents

Import from Self-Contained File E:\mysql\bak\library_1_bak.sql ...
Select the SQL/dump file to import. Please note that the whole file will be imported.

Default Schema to be Imported To

Default Target Schema: library_2 New... The default schema to import the dump into.
NOTE: this is only used if the dump file doesn't contain its schema, otherwise it is ignored.

Select Database Objects to Import (only available for Project Folders)

Imp... Schema Imp... Schema Objects
Dump Structure and Data Select Views Select Tables Unselect All

Press [Start Import] to start... Start Import

Import from Disk Import Progress

Import Completed

Status:
1 of 1 imported.

Log:

```
Creating schema library_2
19:43:57 Restoring E:\mysql\bak\library_1_bak.sql
Running: mysql.exe --defaults-file="C:\Users\HP\AppData\Local\Temp\tmpnw8fr764.cnf" --protocol=tcp --host=localhost --user=root --port=3306 --default-character-set=utf8 --comments --database=library_2 < "E:\mysql\bak\library_1_bak.sql"
19:43:57 Import of E:\mysql\bak\library_1_bak.sql has finished
```

6.恢复 (cmd)

```
E:\mysql\MySQL Server 8.0\bin>mysql -u root -p test1<E:\mysql\bak\library_1_bak.sql
Enter password: *****
```

7.使用 sql 语句删除数据库

```
1  
2 • drop database library_1;  
3  
4
```

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or toggle automatic help.

Output			Context Help	Snippets
#	Time	Action	Message	Duration / Fetch
1	19:57:11	create database library_1	Error Code: 1007. Can't create database 'library_1'; database exists	0.000 sec
2	19:57:21	drop database library_1	0 row(s) affected	0.031 sec