用户管理

1. **创建用户 user_1 和 user_2**

```sql
CREATE USER 'user_1'@'localhost' IDENTIFIED BY '1234';
CREATE USER 'user_2'@'localhost' IDENTIFIED BY '1234';
```

2. **将 user_2 重命名为 user_3**

```sql
RENAME USER 'user_2'@'localhost' TO 'user_3'@'localhost';
```

3. **修改 user_3 的密码为 123456**

```sql
ALTER USER 'user_3'@'localhost' IDENTIFIED BY '123456';
```

4. **删除 user_3**

```sql
DROP USER 'user_3'@'localhost';
```

5. **以 user_1 登录并切换到 mydb 数据库**

```sql
# 退出 MySQL，以 user_1 重新登录
mysql -u user_1 -p
```

```sql
CREATE DATABASE mydb;
USE mydb; -- 若 mydb 不存在会报错，建议替换为 USE yggl;
```

权限管理

1. **授予 user_1 对 Employees 表的查询权限**

```sql
GRANT SELECT ON yggl.Employees TO 'user_1'@'localhost';
```

2. **以 user_1 测试权限**
   - 查询数据（成功）：

   ```sql
   SELECT * FROM yggl.Employees;
   ```

   - 插入数据（失败，无 INSERT 权限）：

   ```sql
   INSERT INTO yggl.Employees VALUES ('999999', '测试', '本科', '2000-01-01', '男', 1, '地址', '123456', '1');
   ```

3. **授予 user_1 更多权限并查看权限**

```
GRANT INSERT, UPDATE, DELETE ON yggl.Employees TO 'user_1'@'localhost';
SHOW GRANTS FOR 'user_1'@'localhost';
```

4. **以 user_1 再次测试插入数据**
（此时应成功）：

```
INSERT INTO yggl.Employees VALUES ('999999', '测试', '本科', '2000-01-01', '男', 1, '地
址', '123456', '1');
```

5. **撤销 user_1 的 SELECT 权限**

```
REVOKE SELECT ON yggl.Employees FROM 'user_1'@'localhost';
```

6. **以 user_1 测试查询（失败）**

```
SELECT * FROM yggl.Employees; -- 无权限
```

7. **撤销 user_1 所有权限**

```
REVOKE ALL PRIVILEGES, GRANT OPTION FROM 'user_1'@'localhost';
```

角色管理

1. **创建用户 user_3 和 user_4**

```
CREATE USER 'user_3'@'localhost' IDENTIFIED BY '1234';
CREATE USER 'user_4'@'localhost' IDENTIFIED BY '1234';
```

2. **创建角色并授予权限**

```
CREATE ROLE db_read, db_write;
GRANT SELECT ON yggl.* TO db_read;
GRANT INSERT, UPDATE, DELETE, SELECT ON yggl.* TO db_write;
```

3. **分配角色并激活**

```
GRANT db_read TO 'user_3'@'localhost';
GRANT db_write TO 'user_4'@'localhost';
-- 激活角色（MySQL 8.0+）
SET DEFAULT ROLE ALL TO 'user_3'@'localhost', 'user_4'@'localhost';
```

4. **验证权限**

   - **user_3**（仅 SELECT）：

     ```
     SELECT * FROM yggl.Employees; -- 成功
     INSERT INTO yggl.Employees VALUES (...); -- 失败
     ```
```

- **user_4**（可增删改查）:

```
INSERT INTO yggl.Employees VALUES (...); -- 成功
```