

数据库应用

【实验环境】

操作系统: macOS

Tools: DataGrip

Database: MySQL 8.0

【实验目的】

本实验主要是数据库的应用, 通过编写C++或Java或Python程序, 来操作数据库表, 对数据库中的记录进行增加, 删除, 查询和修改等操作。

【实验内容】

选择一门编程语言实现数据库的增删查改操作。

【实验结果】

```
# -*- coding: utf-8 -*-
```

```
"""
```

```
Spyder Editor
```

```
This is a temporary script file.
```

```
"""
```

```
import pymysql
```

```
conn = pymysql.connect(host='127.0.0.1', port=3306, user='root',  
passwd='ques0132qq', db='cos', charset='utf8')  
cursor = conn.cursor()
```

```
def select(cursor):
```

```
    # 查询
```

```
    sql_s = 'select * from Patron'
```

```
    cursor.execute(sql_s)
```

```
    row_s = cursor.fetchmany(100)
```

```
    return row_s
```

```
def select_all(cursor):
```

```
    print('查询所有记录: ')
```

```
    for s in select(cursor):
```

```
        print(s)
```

```
def insert(conn, cursor):
```

```
    # 增加
```

```
    cursor.execute("insert into Patron(patron_id, name, address) \\  
        values(%, %, %s)", ['568', '许晴亮', '文荟公寓'])
```

```
    conn.commit()
```

```
    select_all(cursor)
```

```
def delete(conn, cursor):
```

```
    # 删除
```

```
    cursor.execute("delete from Patron where patron_id like %s",  
        ['568'])
```

```
    conn.commit()
```

```
select_all(cursor)

def update(conn, cursor):
    # 更新
    cursor.execute("update Patron set name = %s where patron_id like
                    %s", ['xql', '568'])
    conn.commit()
    select_all(cursor)

print('增加一条记录...')
insert(conn, cursor)

print('修改记录:')
update(conn, cursor)

print('删除记录: ')
delete(conn, cursor)

cursor.close()
conn.close()
```