05 JDBC 事务处理

`JDBC`

一：事务处理

1、准备数据创建表

```sql
CREATE TABLE account (
id INT PRIMARY KEY AUTO_INCREMENT,
NAME VARCHAR(10),
balance DOUBLE
)
```

2、添加数据

```sql
INSERT INTO account (NAME, balance) VALUES ('Jack', 1000), ('Rose', 1000);
```

二：执行事务

1、转账案例

```java
@Test
    public void test11() throws Exception {
            Connection conn = null;
            PreparedStatement pstmt1 = null;
            PreparedStatement pstmt2 = null;
            try {
                //1.获取连接
                conn = JDBCUtils.getConnection();
                //开启事务
                conn.setAutoCommit(false);
```

```java
11.                 //定义sql
12.                 // 张三 - 500
13.                 String sql1 = "update account set balance = balance - ?
    where id = ?";
14.                 // 李四 + 500
15.                 String sql2 = "update account set balance = balance + ?
    where id = ?";
16.                 //3.获取执行sql对象
17.                 pstmt1 = conn.prepareStatement(sql1);
18.                 pstmt2 = conn.prepareStatement(sql2);
19.                 //4. 设置参数
20.                 pstmt1.setDouble(1,500);
21.                 pstmt1.setInt(2,1);
22.                 pstmt2.setDouble(1,500);
23.                 pstmt2.setInt(2,2);
24.                 //执行sql
25.                 pstmt1.executeUpdate();
26.                 // 手动制造异常
27.              int i = 3/0;
28.
29.                 pstmt2.executeUpdate();
30.                 //提交事务
31.                 conn.commit();
32.            } catch (Exception e) {
33.                 //事务回滚
34.                 if(conn != null) {
35.                     conn.rollback();
36.                 }
37.                 e.printStackTrace();
38.         }finally {
39.             JDBCUtils.close(pstmt1,conn);
40.             JDBCUtils.close(pstmt2,null);
41.         }
```