一对多查询((多对一)

一、主要标签

collection

1、属性

property
ofType

二、示例

```
在一对一示例的基础上:
需求:
查询所有用户User信息及用户关联的账户Acount信息。
分析:
用户信息和他的账户信息为一对多关系,并且查询过程中如果用户没有账户信息,此时也要将用户信息
```

代码实现

1、User 类加入 List<Account>获取账户信息

查询出来,我们想到了左外连接查询比较合适。

```
public class User implements Serializable {
```

```
private Integer id;
private String username;
private String address;
private String sex;
private Date birthday;
//一对多关系映射: 主表实体应该包含从表实体的集合引用
private List<Account> accounts;
public List<Account> getAccounts() {
  return accounts;
public void setAccounts(List<Account> accounts) {
  this.accounts = accounts;
public Integer getId() {
  return id;
public void setId(Integer id) {
  this.id = id;
public String getUsername() {
  return username;
public void setUsername(String username) {
  this.username = username;
public String getAddress() {
  return address;
public void setAddress(String address) {
  this.address = address;
```

```
}
   public String getSex() {
     return sex;
   public void setSex(String sex) {
     this.sex = sex;
   public Date getBirthday() {
      return birthday;
   public void setBirthday(Date birthday) {
     this.birthday = birthday;
   @Override
   public String toString() {
      return "User{" +
           "id=" + id +
           ", username='" + username + '\" +
           ", address='" + address + '\" +
", sex='" + sex + '\" +
", birthday=" + birthday +
           '}';
  }
}
```

2、用户持久层Dao 接口中加入查询方法

List<User> findAll();

3、用户持久层UserDao.xml映射文件配置

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE mapper
    PUBLIC "-//mybatis.org//DTD Mapper 3.0//EN"
    "http://mybatis.org/dtd/mybatis-3-mapper.dtd">
<mapper namespace="com.itheima.dao.IUserDao">
  <!-- 定义User的resultMap-->
  <resultMap id="userAccountMap" type="user">
    <id property="id" column="id"></id>
    <result property="username" column="username"></result>
    <result property="address" column="address"></result>
    <result property="sex" column="sex"></result>
    <result property="birthday" column="birthday"></result>
    <!-- 配置user对象中accounts集合的映射 -->
    <collection property="accounts" ofType="account">
      <id column="aid" property="id"></id>
      <result column="uid" property="uid"></result>
      <result column="money" property="money"></result>
    </collection>
  </resultMap>
  <!-- 查询所有 -->
  <select id="findAll" resultMap="userAccountMap">
    select * from user u left outer join account a on u.id = a.uid
  </select>
  <!-- 根据id查询用户 -->
  <select id="findById" parameterType="INT" resultType="user">
    select * from user where id = #{uid}
  </select>
</mapper>
```

4、测试

```
public class UserTest {
  private InputStream in;
  private SqlSession sqlSession;
  private IUserDao userDao;
  @Before//用于在测试方法执行之前执行
  public void init()throws Exception{
    //1.读取配置文件, 生成字节输入流
    in = Resources.getResourceAsStream("SqlMapConfig.xml");
    //2.获取SqlSessionFactory
    SqlSessionFactory factory = new SqlSessionFactoryBuilder().build(in);
    //3.获取SqlSession对象
    sqlSession = factory.openSession(true);
    //4.获取dao的代理对象
    userDao = sqlSession.getMapper(IUserDao.class);
  @After//用于在测试方法执行之后执行
  public void destroy()throws Exception{
    //提交事务
    // sqlSession.commit();
    //6.释放资源
    sqlSession.close();
    in.close();
  * 测试查询所有
   */
  @Test
  public void testFindAll(){
    List<User> users = userDao.findAll();
    for(User user: users){
      System.out.println("-----每个用户的信息-----");
      System.out.println(user);
      System.out.println(user.getAccounts());
 }
}
```

5、测试结果

```
----每个用户的信息-----
User{id=43, username='小二王', address='北京金燕龙', sex='女', birthday=Sun Mar 04 11:
[]
-----每个用户的信息-----
User{id=45, username='传智播客', address='北京金燕龙', sex='男', birthday=Sun Mar 04 1
[Account{id=null, uid=45, money=1000.0}]
-----每个用户的信息-----
User{id=46, username='老王', address='北京', sex='女', birthday=Wed Mar 07 17:37:26 C
[Account{id=null, uid=46, money=1000.0}, Account{id=null, uid=46, money=2000.0}]
```

可以看到,id=46的用户有2个账号,且会显示在一条记录里,这是mybatis的作用