1, ArrayHandler

```
@Test
       public void test1()throws SQLException {
              //ArrayHandler适合取一条记录,把该记录的每一列封装到一个object类
型的数组中
              QueryRunner qRunner = new QueryRunner(C3POUtil.getDataSource());
              Object object[] = qRunner.query("select *from linm", new
ArrayHandler());
              for(Object object2:object)
                      System. out. println(object2);
              }
2, ArrayListHandler
       @Test
       public void test2()throws SQLException{
              //ArrayListHandler适合取多条记录,把每一条记录的每列值封装到一个
数组中object[],把数组封装到一个list中
              QueryRunner qRunner = new QueryRunner(C3POUtil.getDataSource());
              List<Object[]>obj = qRunner.query("select *from linm", new
ArrayListHandler());
              for(Object[] object2:obj)
                      for(Object os :object2) {
                             System. out. print (os+"");
                      System. out. println();
              }
       }
3,
        ColumnListHandler
       @Test
       public void test3()throws SQLException{
              //ColumnListHandler:取出某一列的数据, 封装到list中
```

QueryRunner qRunner = new QueryRunner(C3POUtil.getDataSource());

```
List < Object > list = qRunner.query ("select *from linm", new
ColumnListHandler(2));
              for(Object o:list)
                     System. out. println(o);
              }
       }
       4, KeyedHandler
       @Test
       public void test4() throws SQLException{
              //map中的key是不可以重复的
              //KeyedHandler:取出多条记录,每一条记录封装在一个map集合中,在把
这个map封装在另外一个map中,key为指定的字段值
              QueryRunner qRunner = new QueryRunner(C3POUtil.getDataSource());
              //大map的key是是表中的某列数据,小map中的key是列名。所以大map是
object类型, 小map是string
              Map<Object, Map<String, Object >> list = qRunner.guery("select
*from linm", new KeyedHandler(1));
              for(Map.Entry<Object, Map<String, Object>> m:list.entrySet())
                     System. out. println(m. getKey());
                     for(Map. Entry < String, Object > mm: m. getValue(). entry Set())
                             System. out. println (mm. getKey()+"
"+mm.getValue());
                     System.out.println("----");
              }
       }
        5, MapHandler
       @Test
       public void test5() throws SQLException{
              //map中的key是不可以重复的
              //MapHandler:适合取一条记录,把当前记录的列名和列值放到一个map集
合中
```

```
QueryRunner qRunner = new QueryRunner(C3POUtil.getDataSource());
                                             Map<String, Object> list = qRunner.query("select *from linm",
new MapHandler());
                      for (Map. Entry \langle String, Object \rangle li:list.entry Set())
                                             System.out.println(li.getKey()+" "+li.getValue());
                      }
                      6, MapListHandler
                      @Test
                      public void test6() throws SQLException{
                                            //map中的key是不可以重复的
                                             //MapListHandler:适合取多条记录,把每一条记录封装到一个map中,在
把map封装在一个list集合中
                                             QueryRunner gRunner = new QueryRunner(C3POUtil.getDataSource());
                                            List \( Map \( String, Object \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( 
linm", new MapListHandler());
                      for (Map (String, Object) ob:list)
                                             for (Map. Entry \langle String, Object \rangle li:ob. entry Set ())
                      System.out.println(li.getKey()+" "+li.getValue());
                                                                   }
                          7, ScalarHandler
                      @Test
                      public void test7() throws SQLException{
                                            //map中的key是不可以重复的
                                             //ScalarHandler:适合取单行单列的数据
                                             QueryRunner qRunner = new QueryRunner(C3POUtil.getDataSource());
                                             Object object = qRunner.query("select count(*) from linm", new
ScalarHandler(1));
                      System. out. println(object);
                      System.out.println(object.getClass().getName());//得到object的数据类型
```

```
}
      8, BeanHandler
      @Test
      public void test8() throws SQLException{
             //map中的key是不可以重复的
             //BeanHandler:适合取单行的数据,没有就返回null值
             QueryRunner qRunner = new QueryRunner(C3POUtil.getDataSource());
             user user = qRunner.query("select *from linm", new
BeanHandler (user (user class));
          }
      9, BeanListHandler
      @Test
      public void test9()throws SQLException{
             //map中的key是不可以重复的
             //BeanListHandler:适合取多行数据,封装在list集合中,没有值的话
list数组的长度为
             QueryRunner qRunner = new QueryRunner(C3POUtil.getDataSource());
             List<user>user = qRunner.query("select *from linm", new
BeanListHandler (user. class));
         for(user user2:user) {
                System.out.println(user2.getId()+" "+user2.getNamess());
         }
```