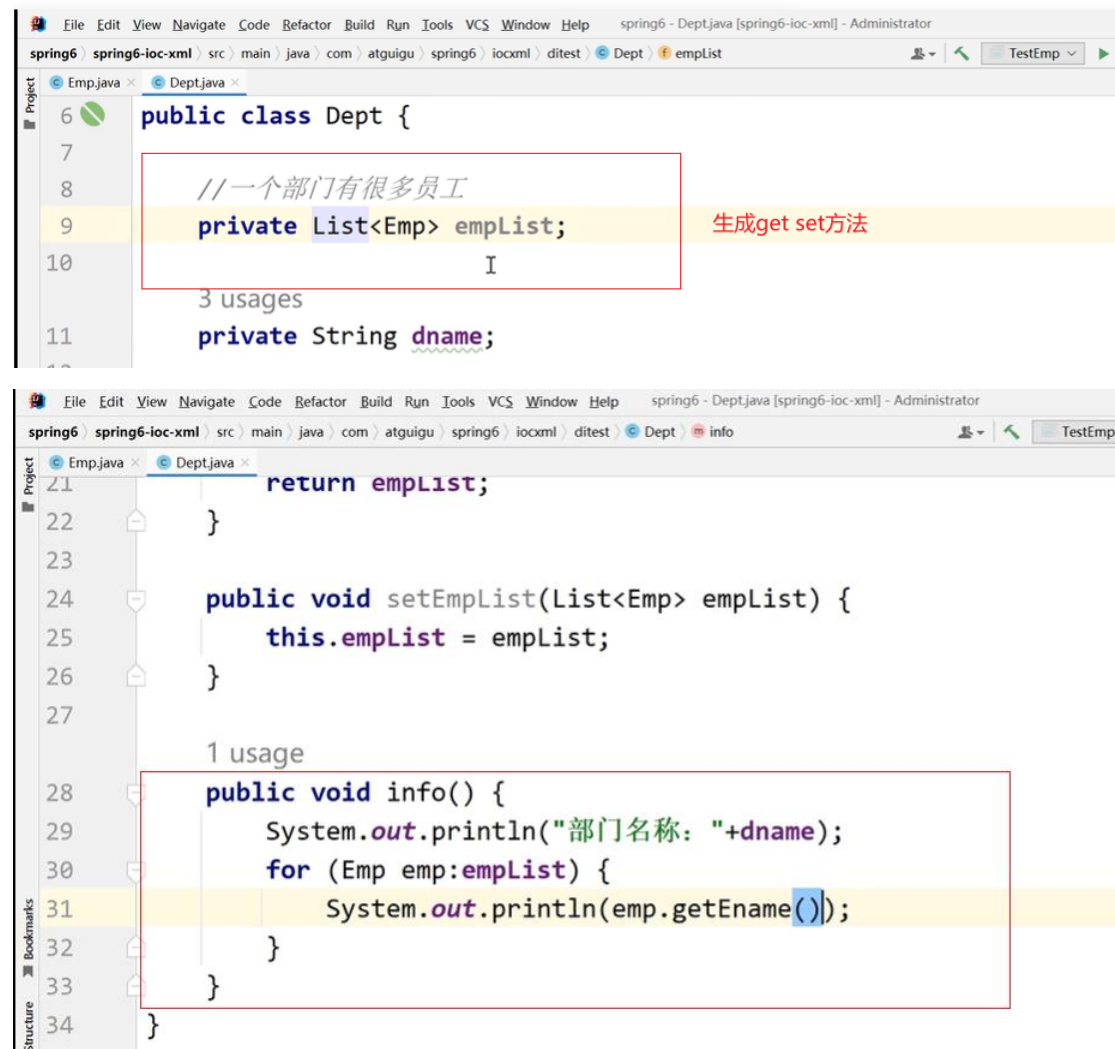


实验 7：为集合类型属性赋值

- 1) 为 list 集合类型属性赋值
- 2) 为 map 集合类型属性赋值
- 3) 引用集合类型的 bean

环境配置：



- 1、为 list 集合类型属性赋值

```
Emp.java x Dept.java x bean-dilist.xml x
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://www.springframework.org/schema/beans http://www.springframework.org/schema/beans-3.0.xsd"

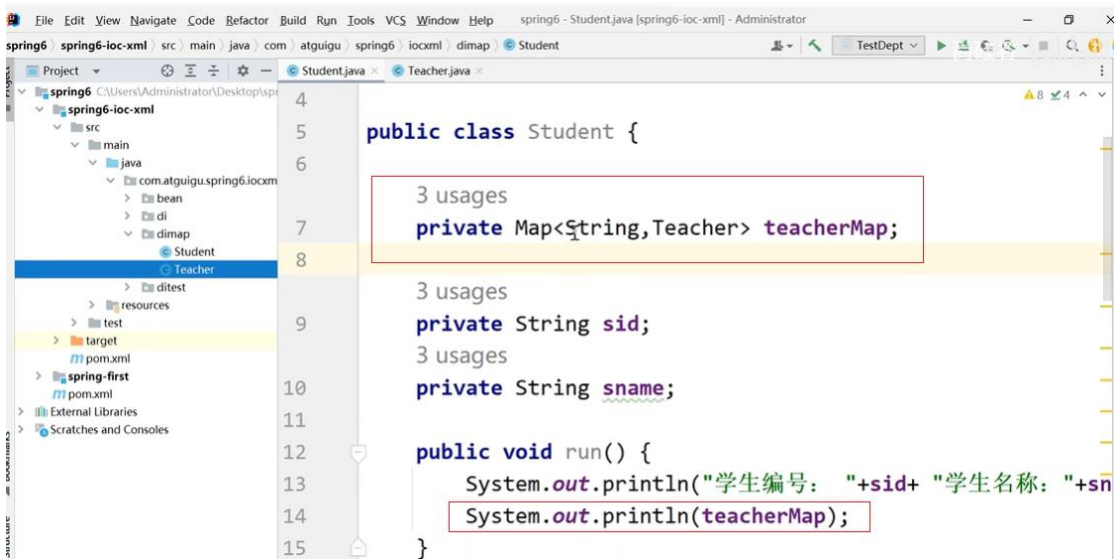
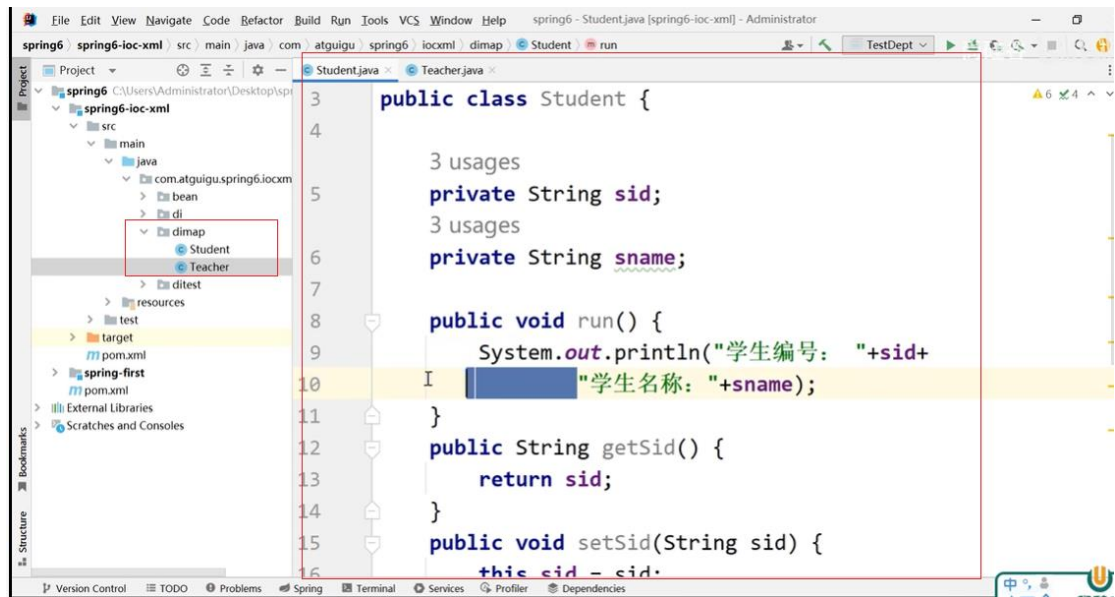
<bean id="empone" class="com.atguigu.spring6.iocxml.ditest.Emp">
  <property name="ename" value="lucy"></property>
  <property name="age" value="20"></property>
</bean>
<bean id="emptwo" class="com.atguigu.spring6.iocxml.ditest.Emp">
  <property name="ename" value="mary"></property>
  <property name="age" value="30"></property>
</bean>

<bean id="dept" class="com.atguigu.spring6.iocxml.ditest.Dept">
  <property name="dname" value="技术部"></property>
  <property name="emplist">
    <list>
      <ref bean="empone"></ref>
      <ref bean="emptwo"></ref>
    </list>
  </property>
</bean>
</beans>
```

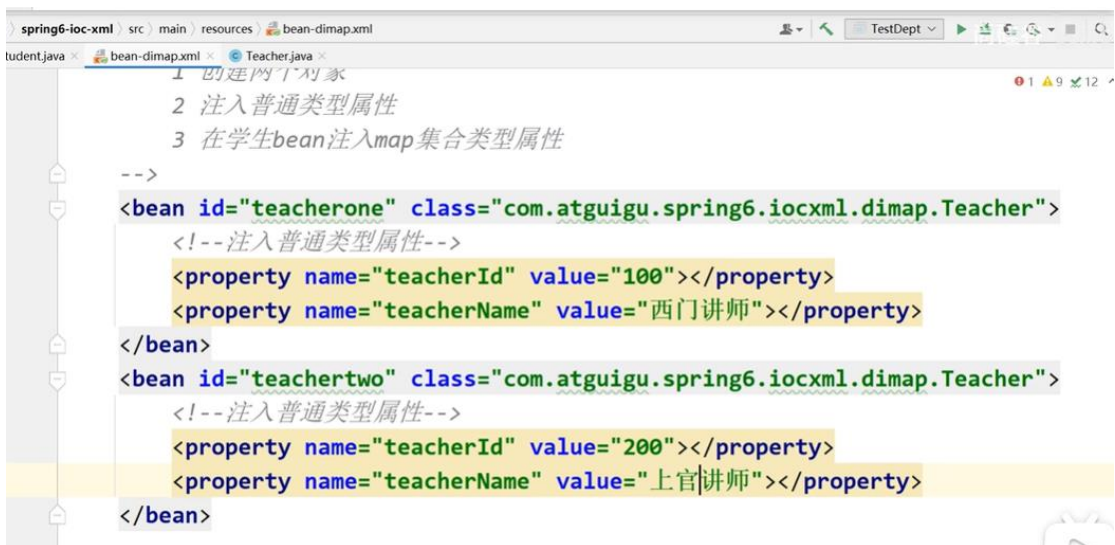
测试:

```
File Edit View Navigate Code Refactor Build Run Tools VCS Window Help spring6 - TestDept.java [spring6-ioc-xml] - Administrator
spring6 spring6-ioc-xml src main java com atguigu spring6 iocxml ditest TestDept main TestEmp
Emp.java x TestDept.java x bean-dilist.xml x
1 package com.atguigu.spring6.iocxml.ditest;
2
3 import ...
4
5
6 public class TestDept {
7
8   public static void main(String[] args) {
9     ApplicationContext context =
10       new ClassPathXmlApplicationContext( configLocation: "bean-dilist.xml" );
11     // 员工对象
12     Dept dept = context.getBean( name: "dept", Dept.class);
13     dept.info();
14   }
15 }
16
```

环境搭建:



2、为 map 集合类型属性赋值



```
bean-dimap.xml Teacher.java
<bean id="student" class="com.atguigu.spring6.iocxml.dimap.Student">
    <!--注入普通类型属性-->
    <property name="sid" value="2000"/>
    <property name="sname" value="张三"/>
    <!--在学生bean注入map集合类型属性-->
    <property name="teacherMap">
        <map>
            <entry>
                <key> I
                <value>10010</value>
            </key>
            <ref bean="teacherone"/>
        </entry>
        <entry>
            <key>
```

```
        </entry>
        <entry>
            <key>
                <value>10086</value>
            </key>
            <ref bean="teachertwo"/>
        </entry>
    </map>
</property>
</bean>
</beans>
```

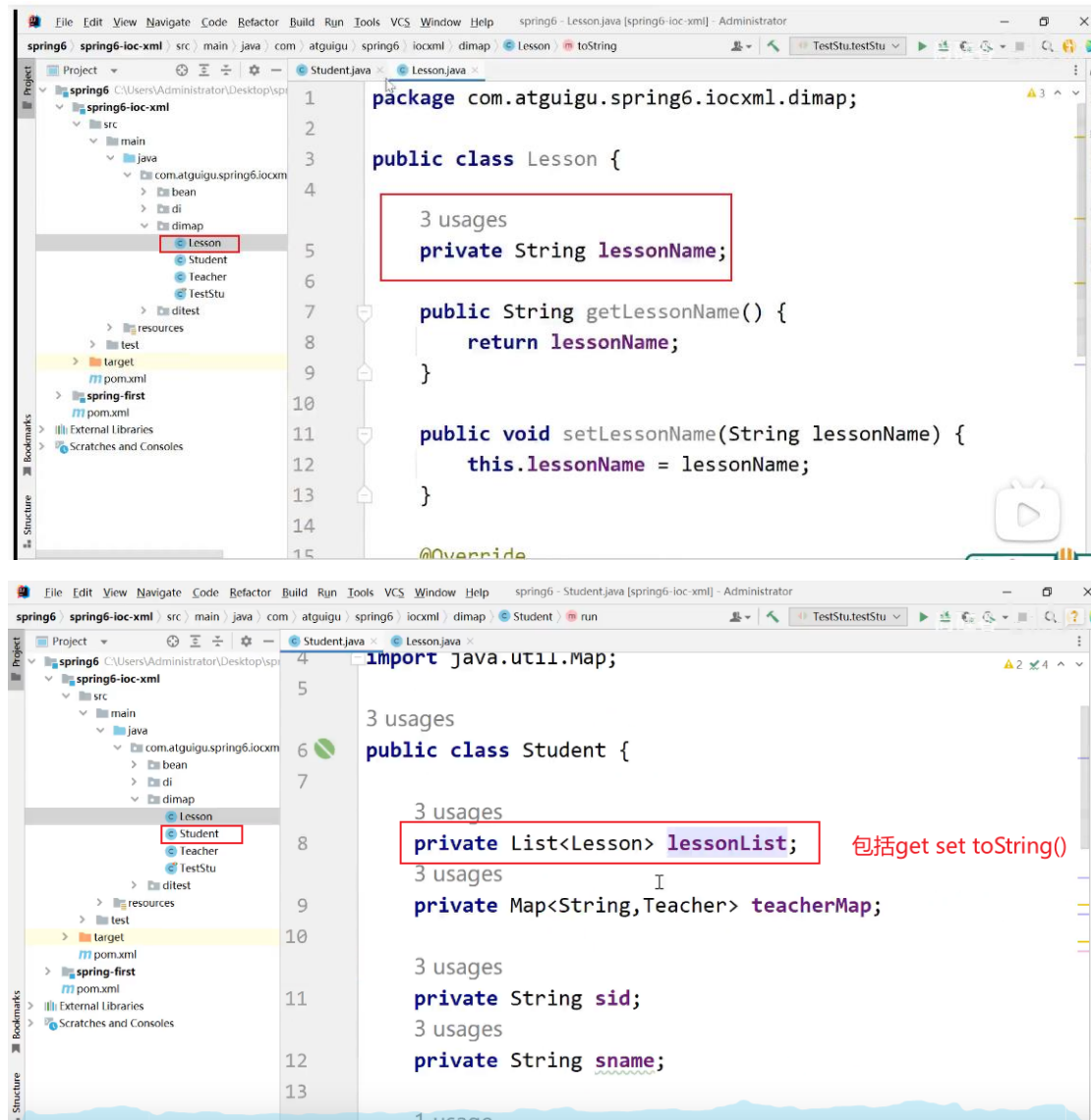
测试:

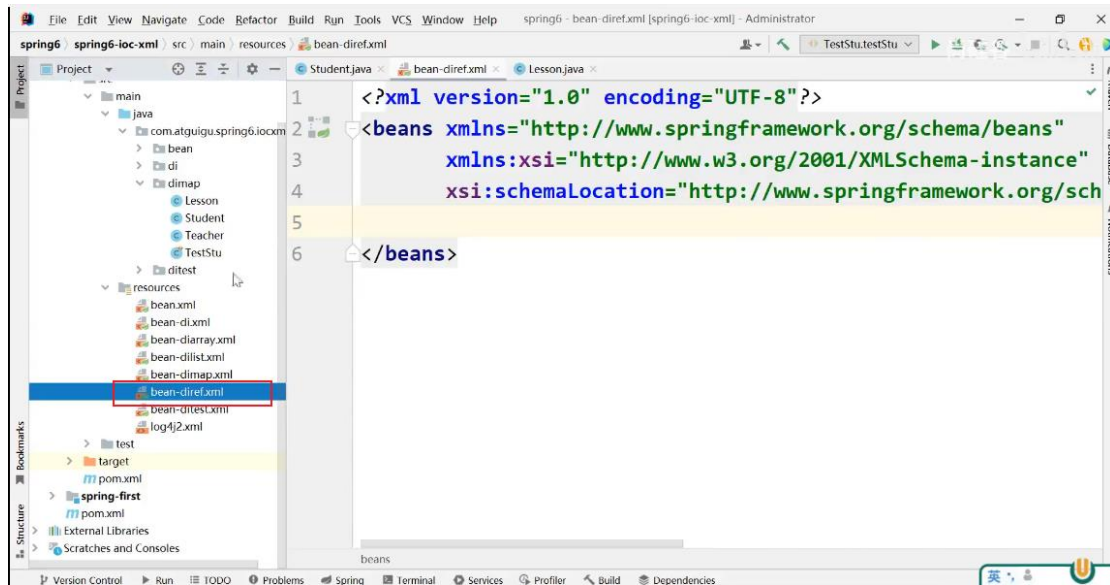
```
File Edit View Navigate Code Refactor Build Run Tools VCS Window Help spring6 - TestStu.java [spring6-ioc-xml] - Administrator
spring6 spring6-ioc-xml src main java com atguigu spring6 iocxml dimap TestStu testStu TestDept
Student.java TestStu.java bean-dimap.xml Teacher.java
3 import org.junit.jupiter.api.Test;
4 import org.springframework.context.ApplicationContext;
5 import org.springframework.context.support.ClassPathXmlApplicationContext;
6
7 public class TestStu {
8
9     @Test
10     public void testStu() {
11         ApplicationContext context =
12             new ClassPathXmlApplicationContext( configLocation: "bean-dimap.xml" );
13         Student student = context.getBean( name: "student", Student.class );
14         student.run();
15     }
```



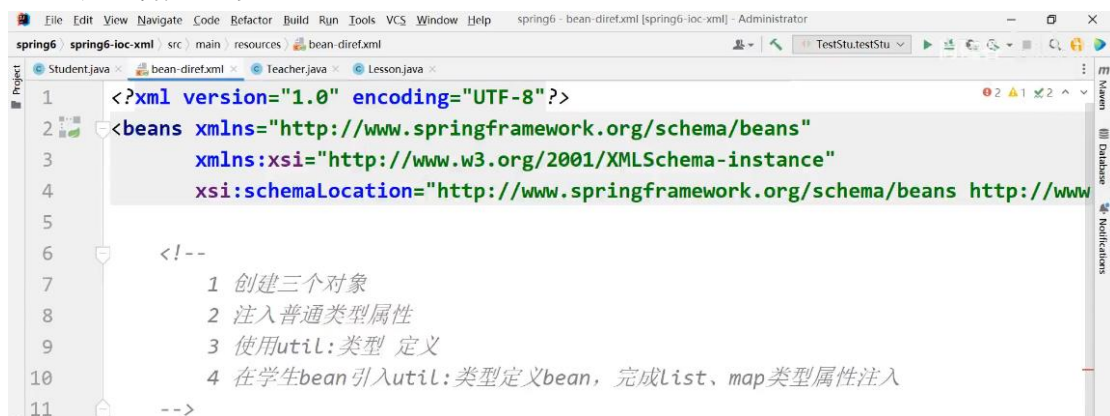
```
Tests passed: 1 of 1 test - 1 sec 174 ms
2022-12-13 09:39:28 075 [main] DEBUG org.springframework.beans.factory.xml
2022-12-13 09:39:28 116 [main] DEBUG org.springframework.beans.factory.sup
2022-12-13 09:39:28 167 [main] DEBUG org.springframework.beans.factory.sup
2022-12-13 09:39:28 168 [main] DEBUG org.springframework.beans.factory.sup
学生编号: 2000学生名称: 张三
{10010=Teacher{teacherId='100', teacherName='西门讲师'}, 10086=Teacher{tea
Process finished with exit code 0
```

环境准备:





3、引用集合类型的 bean



```
<bean id="lessonone" class="com.atguigu.spring6.iocxml.dimap.Lesson">
    <property name="lessonName" value="java开发"></property>
</bean>
<bean id="lesstwo" class="com.atguigu.spring6.iocxml.dimap.Lesson">
    <property name="lessonName" value="前端开发"></property>
</bean>

<bean id="teacherone" class="com.atguigu.spring6.iocxml.dimap.Teacher">
    <property name="teacherId" value="100"></property>
    <property name="teacherName" value="西门讲师"></property>
</bean>
<bean id="teachertwo" class="com.atguigu.spring6.iocxml.dimap.Teacher">
    <property name="lessonName" value="前端开发"></property>
</bean>
```

引用约束，增加命名空间：

```
student.java × TestStu.java × bean-diref.xml × Teacher.java × Lesson.java ×
<?xml version="1.0" encoding="UTF-8"?>
<beans xmlns="http://www.springframework.org/schema/beans"
       xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
       xmlns:util="http://www.springframework.org/schema/util"
       xsi:schemaLocation="http://www.springframework.org/schema/util
                           http://www.springframework.org/schema/util/spring-util.xsd
                           http://www.springframework.org/schema/beans
                           http://www.springframework.org/schema/beans/spring-beans.xsd">

  <!--
    1 创建三个对象
    2 注入普通类型属性
    3 使用util:类型 定义
    4 在学生bean引入util:类型定义bean，完成list、map类型属性注入
  -->
```

```
<bean id="student" class="com.atguigu.spring6.iocxml.dimap.Student">
  <property name="sid" value="10000"></property>
  <property name="sname" value="lucy"></property>
  <!--注入list、map 类型属性-->
  <property name="lessonList" ref="lessonList"></property>
  <property name="teacherMap" ref="teacherMap"></property>
</bean>
```

```
<util:list id="lessonList">
  <ref bean="lessonone"></ref>
  <ref bean="lesstwo"></ref>
</util:list>
```

```
<util:map id="teacherMap">
  <entry>
    <key>
      <value>10010</value>
    </key>
    <ref bean="teacherone"></ref>
  </entry>
  <entry>
    <key>
      <value>10086</value>
    </key>
    <ref bean="teachertwo"></ref>
  </entry>
</util:map>
```

teachertwo (bean-diref.x... Teacher
Ctrl+向下箭头 and Ctrl+向上箭头 will move caret down and up in the editor Next Tip