

Student class :

```
package Package55;

public class Student {
    private int rollNo;
    private String name;

    public Student(int rollNo, String name) {
        super();
        this.rollNo = rollNo;
        this.name = name;
    }

    public int getRollNo() {
        return rollNo;
    }

    public void setRollNo(int rollNo) {
        this.rollNo = rollNo;
    }

    public String getName() {
        return name;
    }

    public void setName(String name) {
        this.name = name;
    }

    @Override
    public String toString() {
        return "Student [rollNo=" + rollNo + ", name=" + name + "]";
    }
}
```

Project class :

```
package Package;

import java.util.ArrayList;

public class Project {
    private String title;
    private ArrayList<Student> studentGroup;

    public Project(String title) {
```

```

        super();
        this.title = title;
        this.studentGroup = new ArrayList<Student>();
    }

    public String getTitle() {
        return title;
    }

    public void setTitle(String title) {
        this.title = title;
    }

    public ArrayList<Student> getStudentGroup() {
        return studentGroup;
    }

    public void setStudentGroup(ArrayList<Student> studentGroup) {
        this.studentGroup = studentGroup;
    }

    public void addStudent(Student s1)
    {
        this.studentGroup.add(s1);
    }

    @Override
    public String toString() {
        return "Project [title=" + title + ", studentGroup=" + studentGroup
            + "]";
    }
}

```

TestProject class :

```

package Package;

import static org.junit.Assert.*;

import java.util.ArrayList;

import org.junit.Test;

public class TestProject {
    Student s1,s2,s3,s4,s5;

    @Test
    public void testProject()
    {

```

```

        Project firstProject = new Project("FirstProject");
        assertEquals("FirstProject", firstProject.getTitle());
        assertTrue(firstProject.getStudentGroup().instanceof
                    ArrayList);
    }

    public void setUp()
    {
        s1 = new Student(11,"ABC");
        s2 = new Student(12,"DEF");
        s3 = new Student(13,"GHI");
        s4 = new Student(14,"PQR");
        s5 = new Student(15,"XYZ");
    }

    @Test
    public void testAddStudent(){
        // create test objects
        setUp();
        //test initial size
        Project first = new Project("First");
        assertEquals(0, first.getStudentGroup().size());
        System.out.println("Size of student group:"+first.getStudentGroup().size());
        first.addStudent(s1);

        assertEquals(1, first.getStudentGroup().size());
        System.out.println("Size of student group:"+first.getStudentGroup().size());
        first.addStudent(s2);

        assertEquals(2, first.getStudentGroup().size());
        System.out.println("Size of student group:"+first.getStudentGroup().size());
        first.addStudent(s3);

        assertEquals(3, first.getStudentGroup().size());
        System.out.println("Size of student group:"+first.getStudentGroup().size());
        first.addStudent(s4);

        assertEquals(4, first.getStudentGroup().size());
        System.out.println("Size of student group:"+first.getStudentGroup().size());
        first.addStudent(s5);

        System.out.println(first);
    }

    public void test() {
        fail("Not yet implemented");
    }
}

```

OUTPUT :

Size of student group:0

Size of student group:1

Size of student group:2

Size of student group:3

Size of student group:4

Project [title=First, studentGroup=[Student [rollNo=11, name=ABC], Student [rollNo=12, name=DEF], Student [rollNo=13, name=GHI], Student [rollNo=14, name=PQR], Student [rollNo=15, name=XYZ]]]
