Step 1, right click on the module

Step 2 Click on Open Module Settings
Step 3 Add new dependency, search for robotium, choose the second one and click OK.

Step 4 go to your app/src/androidTest folder, create your test class.
Step 5:
1. Make sure your test class extends ActivityInstrumentationTest Case2, you need to provide the activity you are testing between “<>”.

2. in the constructor, call super(the activity you want to test.class)

3. in setup(), get a new Solo object

4. in teardown(), call solo.finishOpenedActivities(). Note you need to call finishOpenedActivities first, then call super.tearDown().

```java
public class YourTest extends ActivityInstrumentationTestCase2<MainActivity>
    private Solo solo;

    public YourTest(){
        super(MainActivity.class);
    }

    @Override
    protected void setUp() throws Exception {
        super.setUp();
        solo = new Solo(getInstrumentation(), getActivity());
    }

    @Override
    protected void tearDown() throws Exception {
        solo.finishOpenedActivities();
        super.tearDown();
    }
```
Step 6, create a new test configuration, click on the “+” to add an Android Tests configuration and choose the module you are testing.

A better example:  
http://www.vogella.com/tutorials/Robotium/article.html

Full list of APIs:  