

Brooklyn College

DrJava

A Beginner's Guide

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9/7/2018

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Installation of Java JDK

<http://www.oracle.com/technetwork/java/javase/downloads>

The screenshot shows the Oracle Java SE Downloads page. The page has a header with the Oracle logo and navigation links. A sidebar on the left lists various Java products. The main content area is titled "Java SE Downloads" and features a "Java Platform, Standard Edition" section. A red arrow points to the "JDK" download button.

Java SE Downloads

Java Platform (JDK) 8u111 / 8u112

NetBeans with JDK 8

Java Platform, Standard Edition

Java SE 8u111 / 8u112

Java SE 8u111 includes important security fixes. Oracle strongly recommends that all Java SE 8 users upgrade to this release. Java SE 8u112 is a patch-set update, including all of 8u111 plus additional features (described in the release notes). [Learn more](#)

Important planned change for MD5-signed JARs

Starting with the April Critical Patch Update releases, planned for April 18 2017, all JRE versions will treat JARs signed with MD5 as unsigned. [Learn more and view testing instructions.](#)

For more information on cryptographic algorithm support, please check the JRE and JDK Crypto Roadmap.

- Installation Instructions
- Release Notes
- Oracle License
- Java SE Products
- Third Party Licenses
- Certified System Configurations
- Readme Files
 - JDK ReadMe
 - JRE ReadMe

JDK

DOWNLOAD

Server JRE

DOWNLOAD

JRE

DOWNLOAD

Download the JDK.

The screenshot shows the Oracle Java SE Development Kit 8 Downloads page. The page has a navigation bar with links like Products, Solutions, Downloads, Store, Support, Training, Partners, and About. The main content area is titled 'Java SE Development Kit 8 Downloads' and includes a table of download links for various operating systems and architectures. A red arrow points to the 'Accept License Agreement' radio button.

Java SE Development Kit 8 Downloads

Thank you for downloading this release of the Java™ Platform, Standard Edition Development Kit (JDK™). The JDK is a development environment for building applications, applets, and components using the Java programming language.

The JDK includes tools useful for developing and testing programs written in the Java programming language and running on the Java platform.

See also:

- Java Developer Newsletter: From your Oracle account, select **Subscriptions**, expand **Technology**, and subscribe to **Java**.
- Java Developer Day hands-on workshops (free) and other events
- Java Magazine

JDK 8u111 Checksum
JDK 8u112 Checksum

Java SE Development Kit 8u111

You must accept the Oracle Binary Code License Agreement for Java SE to download this software.

☐ Accept License Agreement ☒ Decline License Agreement

Product / File Description	File Size	Download
Linux ARM 32 Hard Float ABI	77.78 MB	jdk-8u111-linux-arm32-vfp-hflt.tar.gz
Linux ARM 64 Hard Float ABI	74.73 MB	jdk-8u111-linux-arm64-vfp-hflt.tar.gz
Linux x86	160.35 MB	jdk-8u111-linux-i586.rpm
Linux x86	175.04 MB	jdk-8u111-linux-i586.tar.gz
Linux x64	158.35 MB	jdk-8u111-linux-x64.rpm
Linux x64	173.04 MB	jdk-8u111-linux-x64.tar.gz
Mac OS X	227.39 MB	jdk-8u111-macosx-x64.dmg
Solaris SPARC 64-bit	131.92 MB	jdk-8u111-solaris-sparcv9.tar.Z
Solaris SPARC 64-bit	93.02 MB	jdk-8u111-solaris-sparcv9.tar.gz
Solaris x64	140.38 MB	jdk-8u111-solaris-x64.tar.Z
Solaris x64	96.82 MB	jdk-8u111-solaris-x64.tar.gz
Windows x86	189.22 MB	jdk-8u111-windows-i586.exe
Windows x64	194.64 MB	jdk-8u111-windows-x64.exe

Java SE Development Kit 8u112

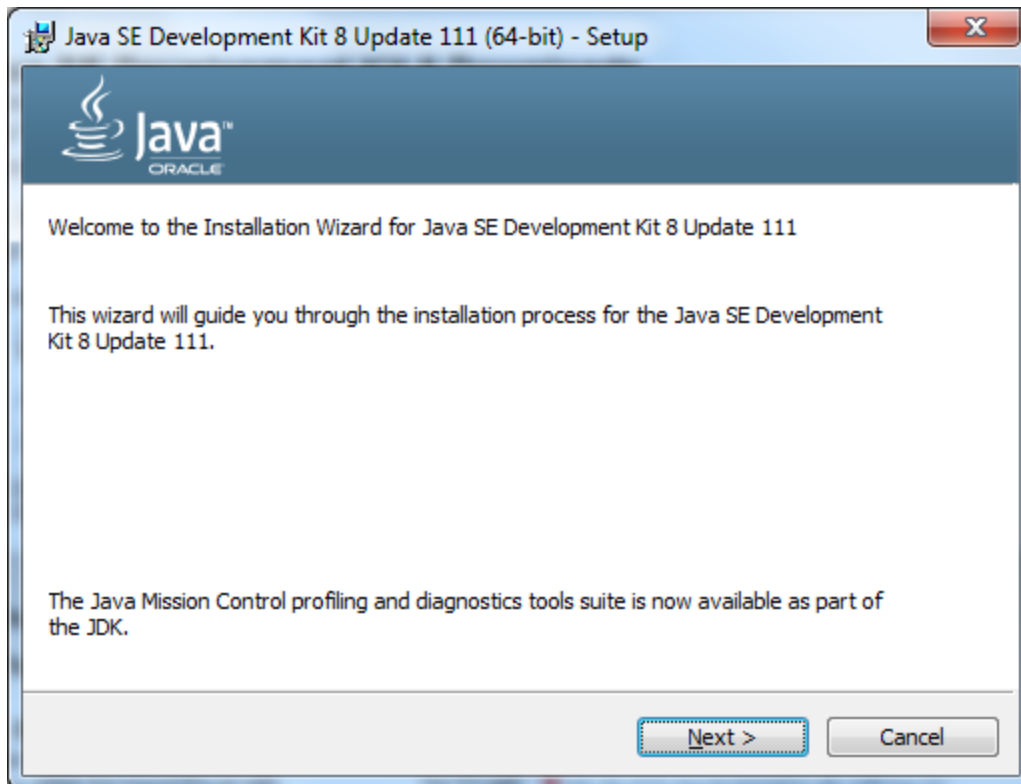
You must accept the Oracle Binary Code License Agreement for Java SE to download this software.

☒ Accept License Agreement ☐ Decline License Agreement

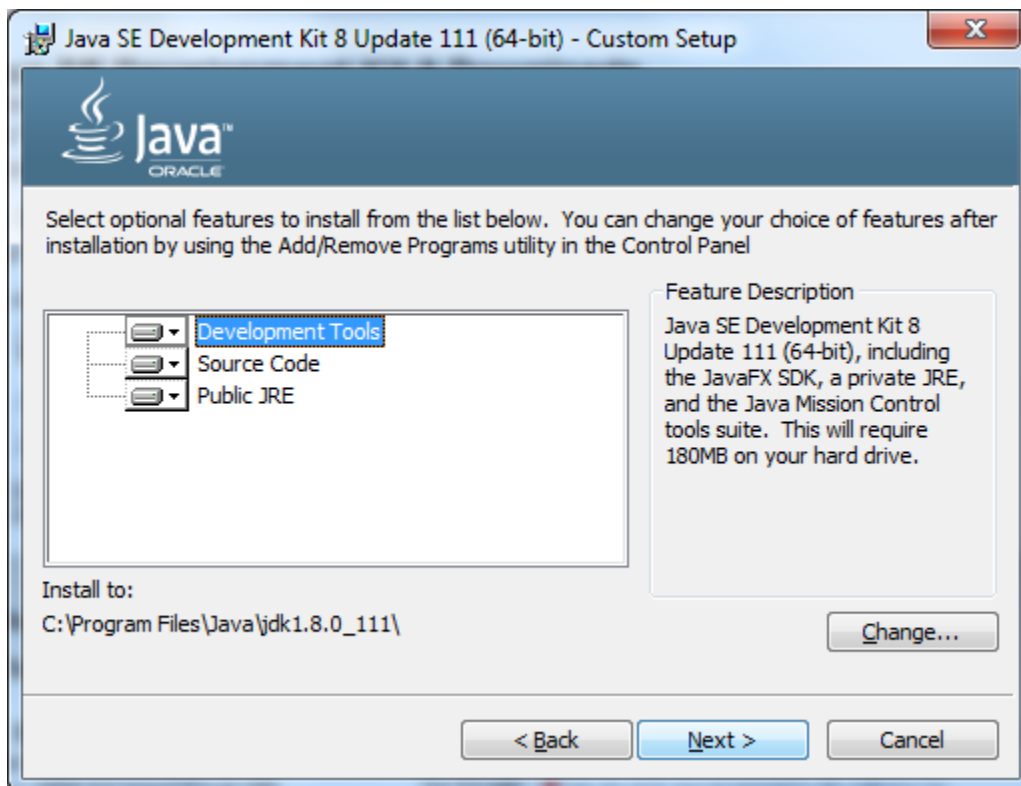
Product / File Description	File Size	Download
Linux x86	162.42 MB	jdk-8u112-linux-i586.rpm
Linux x86	177.12 MB	jdk-8u112-linux-i586.tar.gz

Select to **Accept License Agreement**. Then select the **Download** link next to the Product that matches your Operating System that you are working one (such as Windows x64).

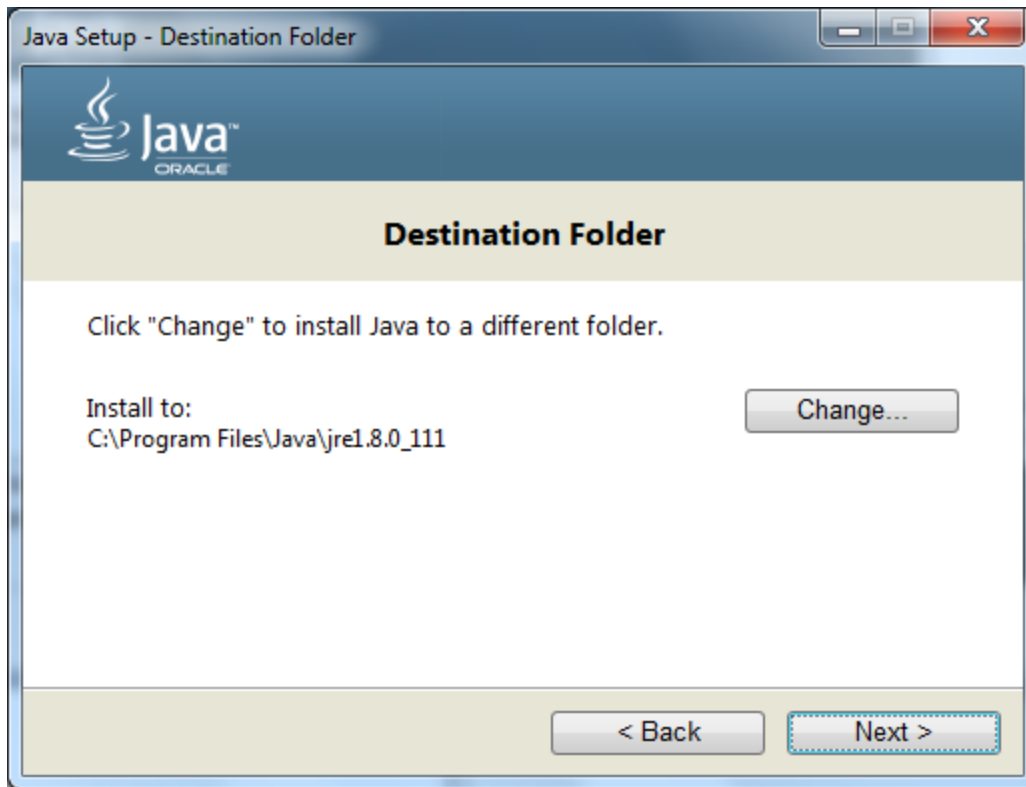
When this download is complete, run the program to install the JDK.



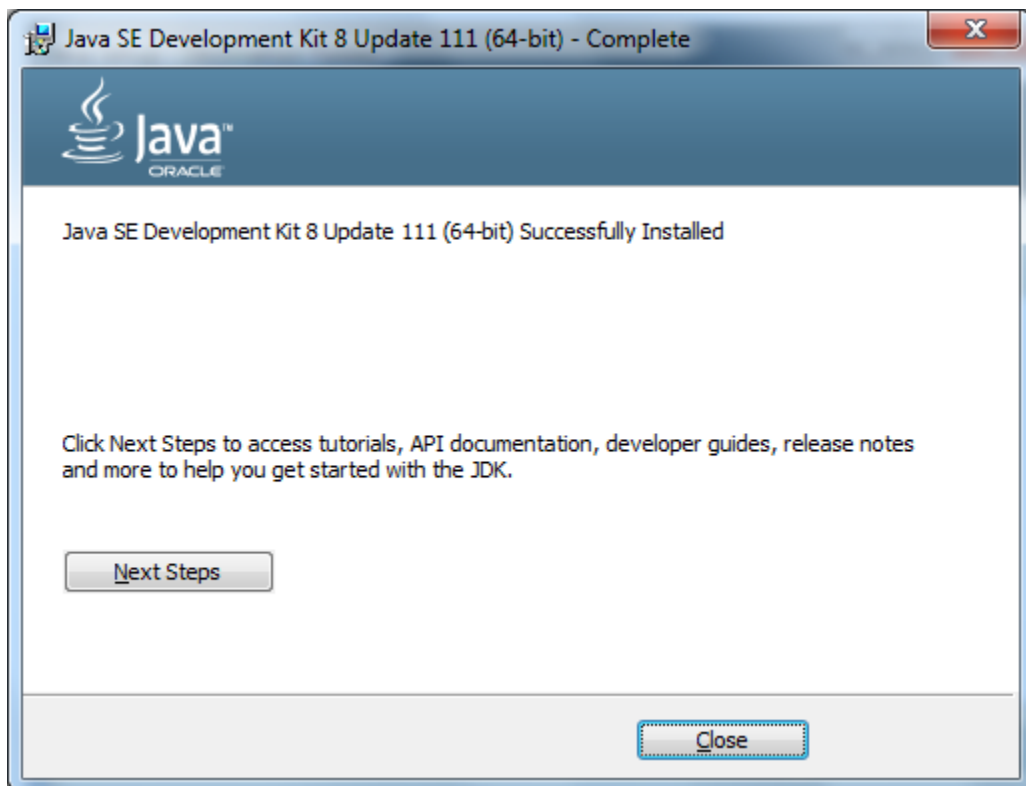
Select **Next**.



Take the defaults, then select **Next** and the install will begin.



Leave the default values and select **Next**.



Click on **Close**.

Installation of DrJava

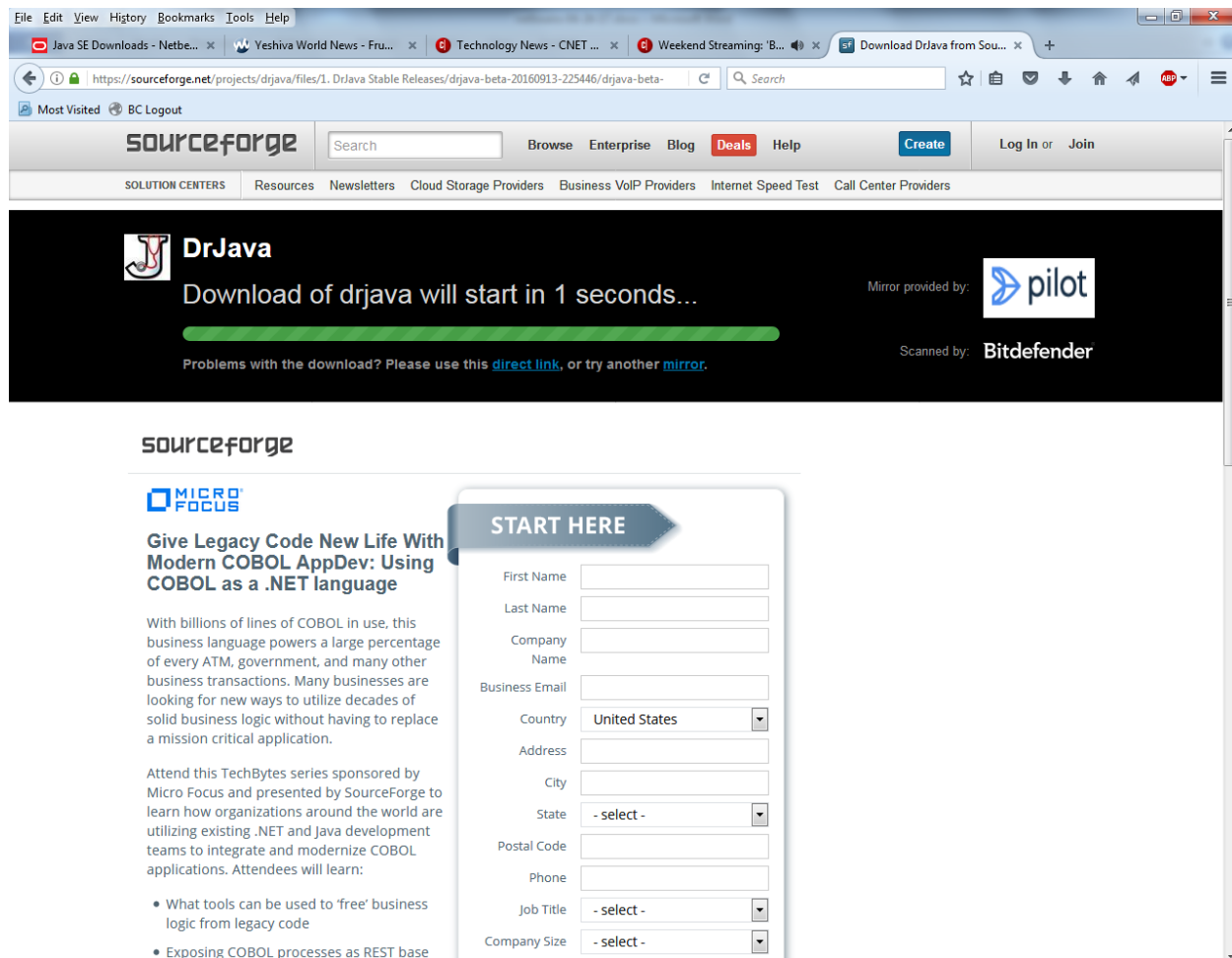
The screenshot shows the DrJava website with the following content:

- About DrJava:** DrJava is a lightweight development environment for writing Java programs. It is designed primarily for students, providing an intuitive interface and the ability to interactively evaluate Java code. It also includes powerful features for more advanced users. DrJava is available for free under the [BSD License](#), and it is under active development by the JavaPLT group at Rice University.
- Current Stable Release:** The current stable release for DrJava is drjava-beta-20160913-225446. This version supports Java 6, 7, and 8. You can read the release notes on the [SourceForge download page](#). Note that the Mac OS X app *only works with the Apple Java 6 JDK*. Oracle Java 7 (and early release Java 8) JDK distributions are not compatible with the DrJava Mac OS X app because Apple and Oracle use different app launchers. The DrJava jar release is compatible with the Oracle JDK distributions, but it must be run from the command line like other jar files.
- Download Options:**
 - Download Jar File
 - Download Windows App
 - Download Mac OS X App
 - [\(more download options\)](#)
- Filing Bug Reports or Feature Requests on SourceForge:** Note that you need to [log in with your SourceForge account](#) first before you can file a request. If you do not have a SourceForge account, please [register yourself at SourceForge](#). This measure was necessary to reduce the amount of spam we receive from automated "bots".
- Over Three Million Downloads of DrJava:** We recently passed the milestone of three million downloads of DrJava. There have been **3,157,742** downloads as of 11 Feb 2017. Thank you for making DrJava so successful! ([statistics by SourceForge](#))
- News and Updates:**
 - DrJava News and Updates**
 - DrJava Beta Release 20160913-225446**
Available for download at <http://drjava.org>.
DrJava is a lightweight programming environment for Java designed to foster test-driven software development. It includes an intelligent program editor, an interactions pane for evaluating program text, a source level debugger, a unit testing tool, and a new code coverage tool.
In addition to bug fixes, this beta release includes two new features introduced since the last stable release:
The new Toolbar button labeled "Coverage" runs all of your unit tests (just like the "Test" button) and determines the code coverage (branches and statements) of these unit tests.

<http://www.drjava.org/>

Select to **Download** for your version of your Operating System, Windows or Mac OS X. If you are on a Linux system (or if the App for your OS does not function correctly), choose the Jar file. A **JAR** (Java ARchive) is a compressed file package that will run on any system with an existing Java installation.


Please note that on newer Macs you will need to select "Download the Jar file". Download the Jar file, place it on your Desktop, and then Double Click the icon to start DrJava.



sourceforge

DrJava


Download of drjava will start in 1 seconds...

Mirror provided by: 

Scanned by: Bitdefender

Problems with the download? Please use this [direct link](#), or try another [mirror](#).

sourceforge

 **GIVE LEGACY CODE NEW LIFE WITH MODERN COBOL APPDEV: USING COBOL AS A .NET LANGUAGE**

With billions of lines of COBOL in use, this business language powers a large percentage of every ATM, government, and many other business transactions. Many businesses are looking for new ways to utilize decades of solid business logic without having to replace a mission critical application.

Attend this TechBytes series sponsored by Micro Focus and presented by SourceForge to learn how organizations around the world are utilizing existing .NET and Java development teams to integrate and modernize COBOL applications. Attendees will learn:

- What tools can be used to 'free' business logic from legacy code
- Exposing COBOL processes as REST base

START HERE

First Name

Last Name

Company Name

Business Email

Country

Address

City

State

Postal Code

Phone

Job Title

Company Size

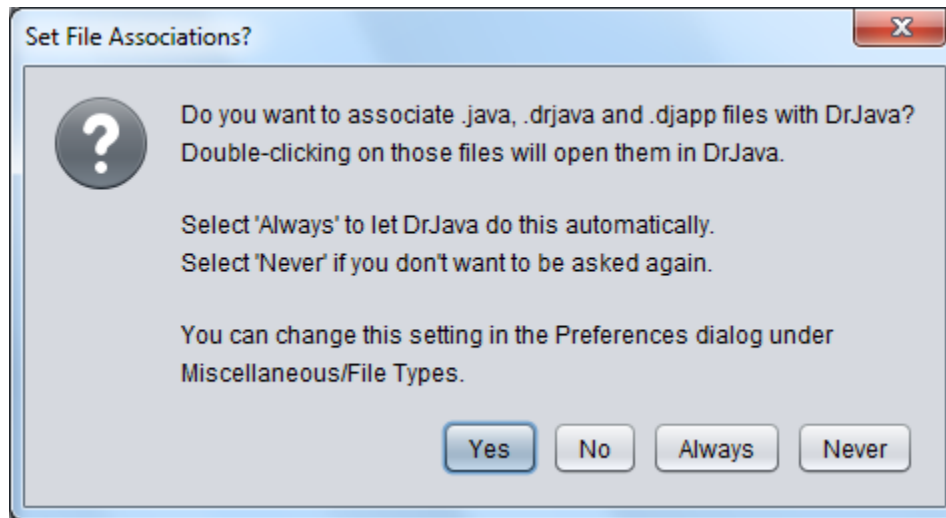
Wait until the download is complete. Then place the file on your Desktop, or in some location that you can easily find it later.

If you are on a Mac and you cannot open DrJava:

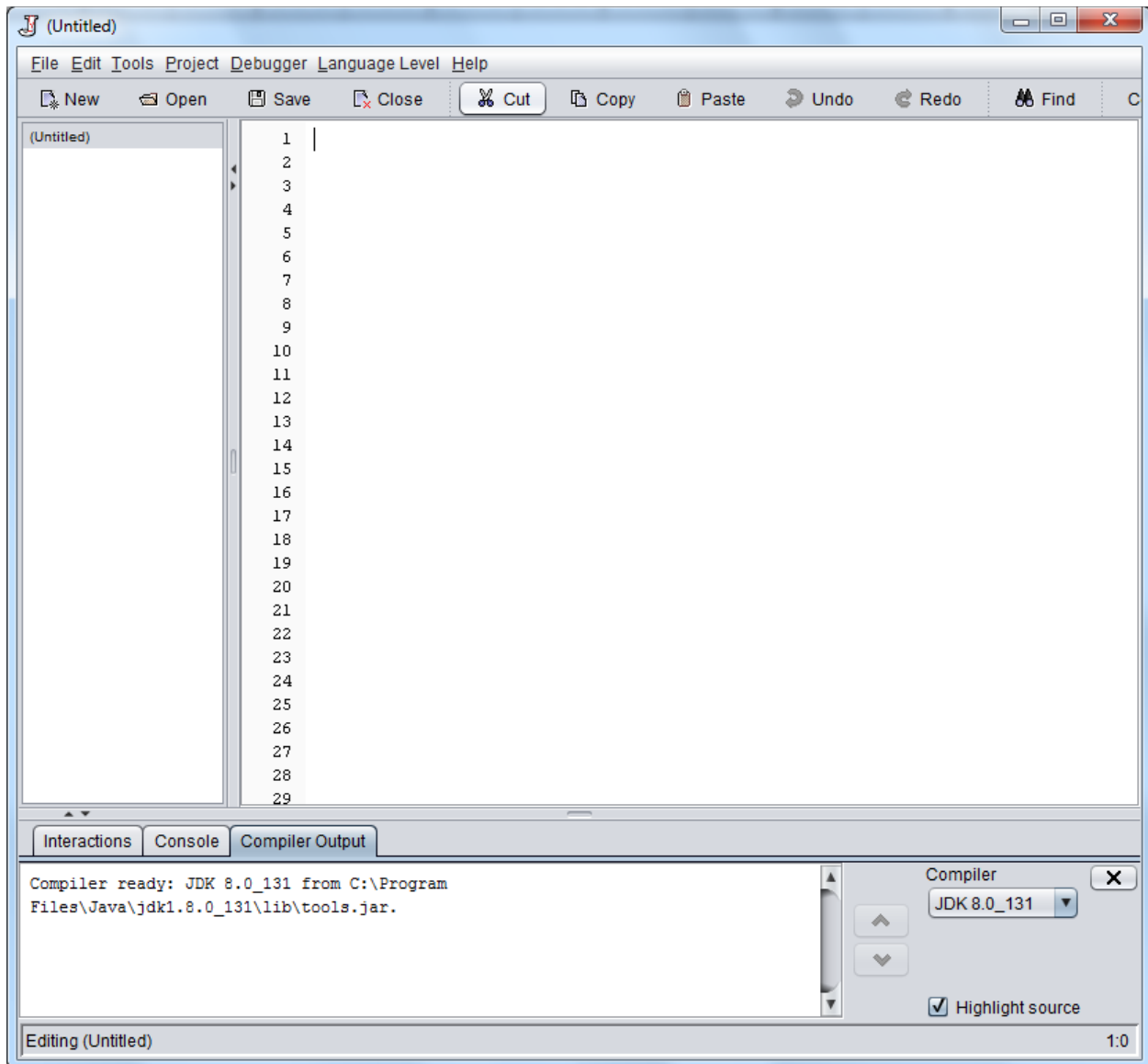
It is likely because of the security settings preventing you from running a program from an unknown developer. You can do the following:

- Open Terminal and then type the following command:
 - **sudo spctl --master-disable**
 - You will key icon. Type your password (or the admin password) and press enter.
- Go to the System Preferences on your Mac. "Anywhere" setting will selected.
- Rerun DrJava and if it asks if you would like open it, select **Open**.
- Go back to the Terminal and type the following command to restore the default setting which prevents unauthorized programs from running:
 - **sudo spctl --master-enable**

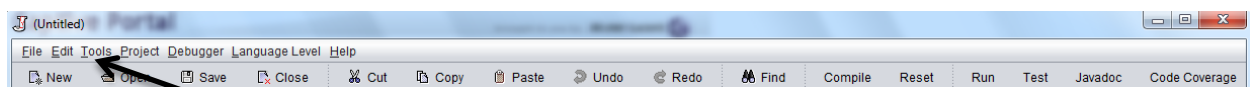
First Program using DrJava



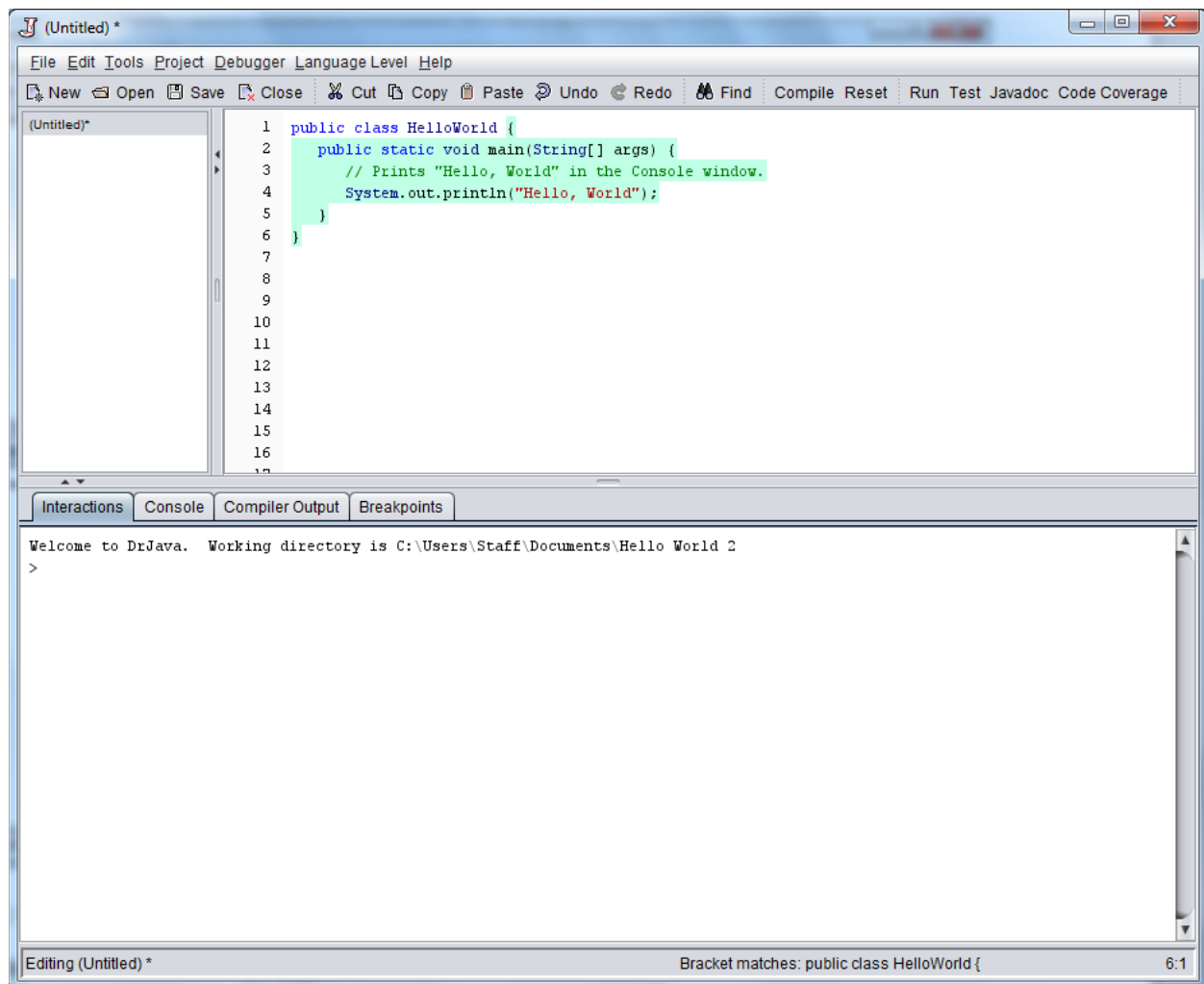
The first time you start DrJava, you will be asked if you want to associate .java and DrJava files with DrJava. If this is your primary Java IDE, select Yes. If you select Yes, then Java files will be associated with DrJava. If you have other IDEs for Java and do not want to make any adjustments, select Never.



If you cannot view the full toolbar at the upper part of the window, you should resize your window.



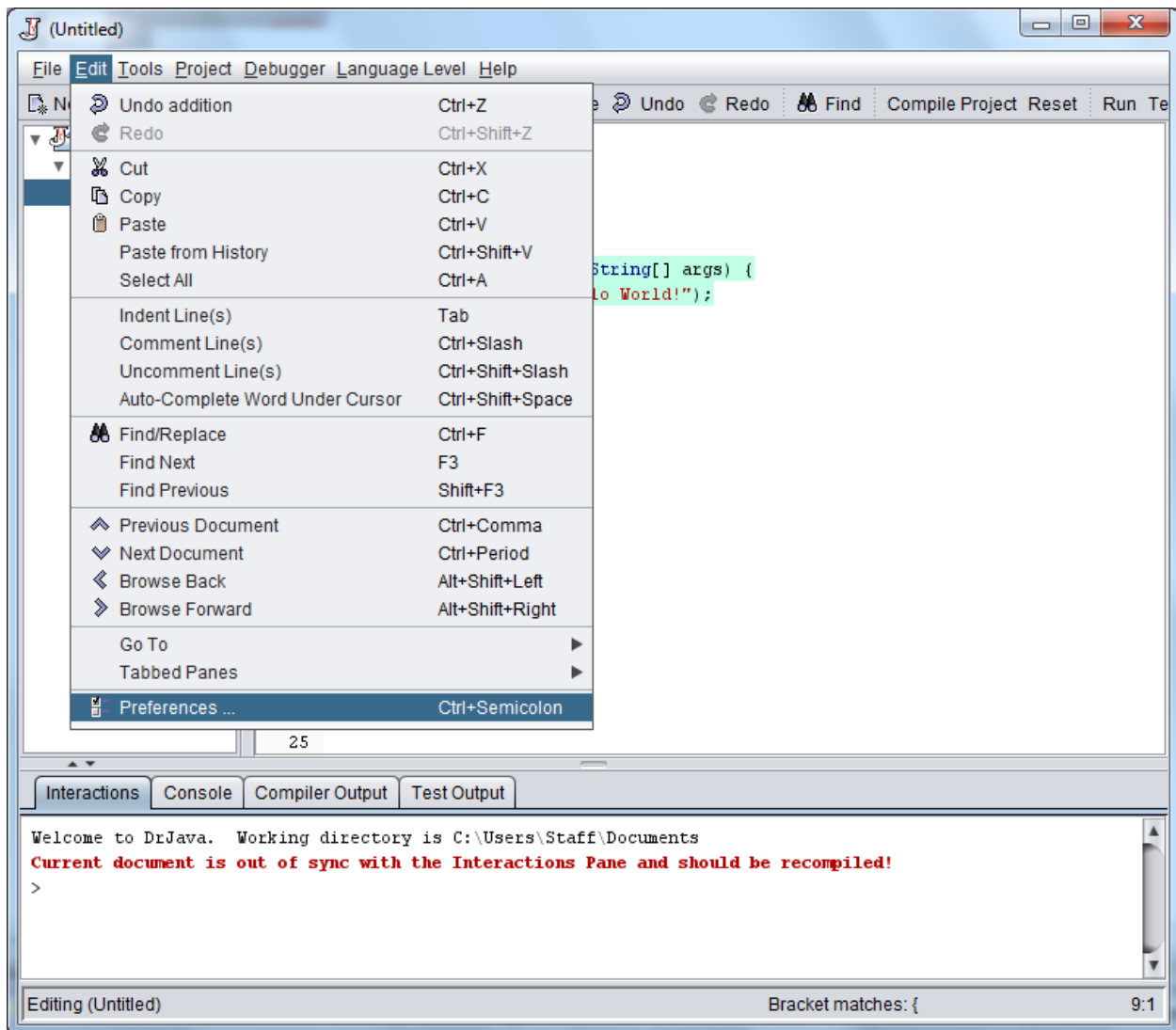
However, if you use the **Tools** menu, you won't need to use the icons on the toolbar.



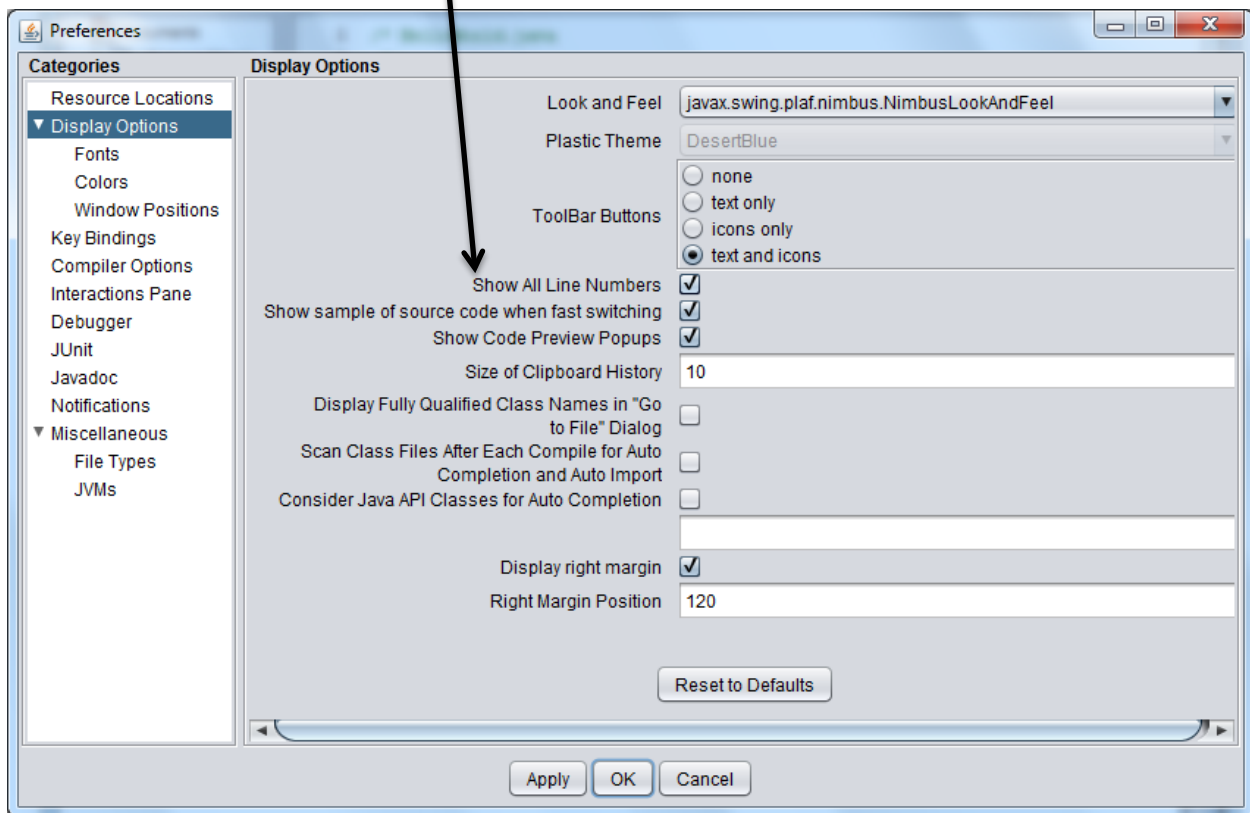
Enter in the following program:

```
public class HelloWorld {  
  
    public static void main(String[] args) {  
  
        // Prints "Hello, World" in the Console window.  
  
        System.out.println("Hello, World");  
  
    }  
  
}
```

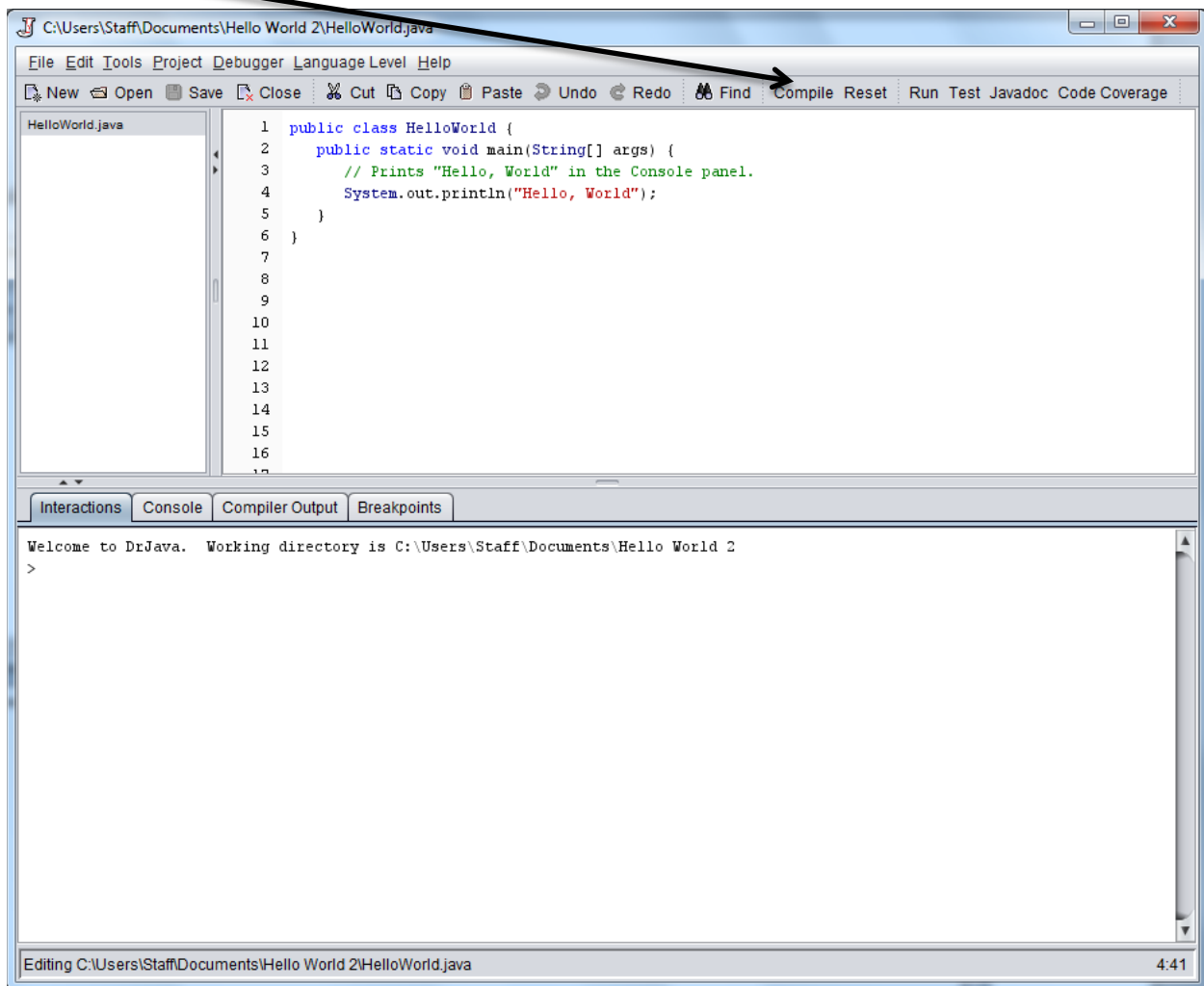
Set the line numbers. Go to **Edit, Preferences**.



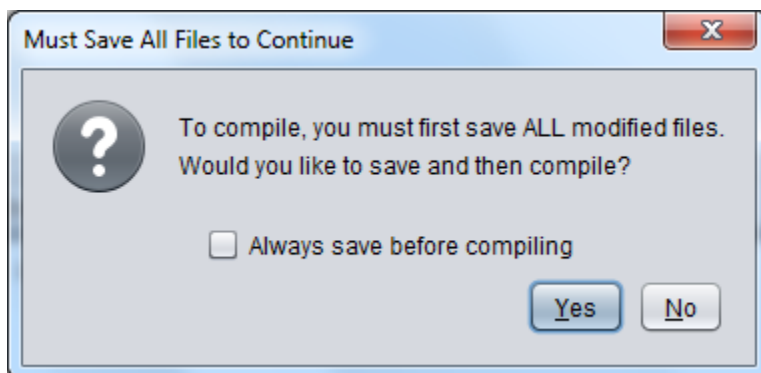
Display Options, Show All Line Numbers. Then select **OK**.



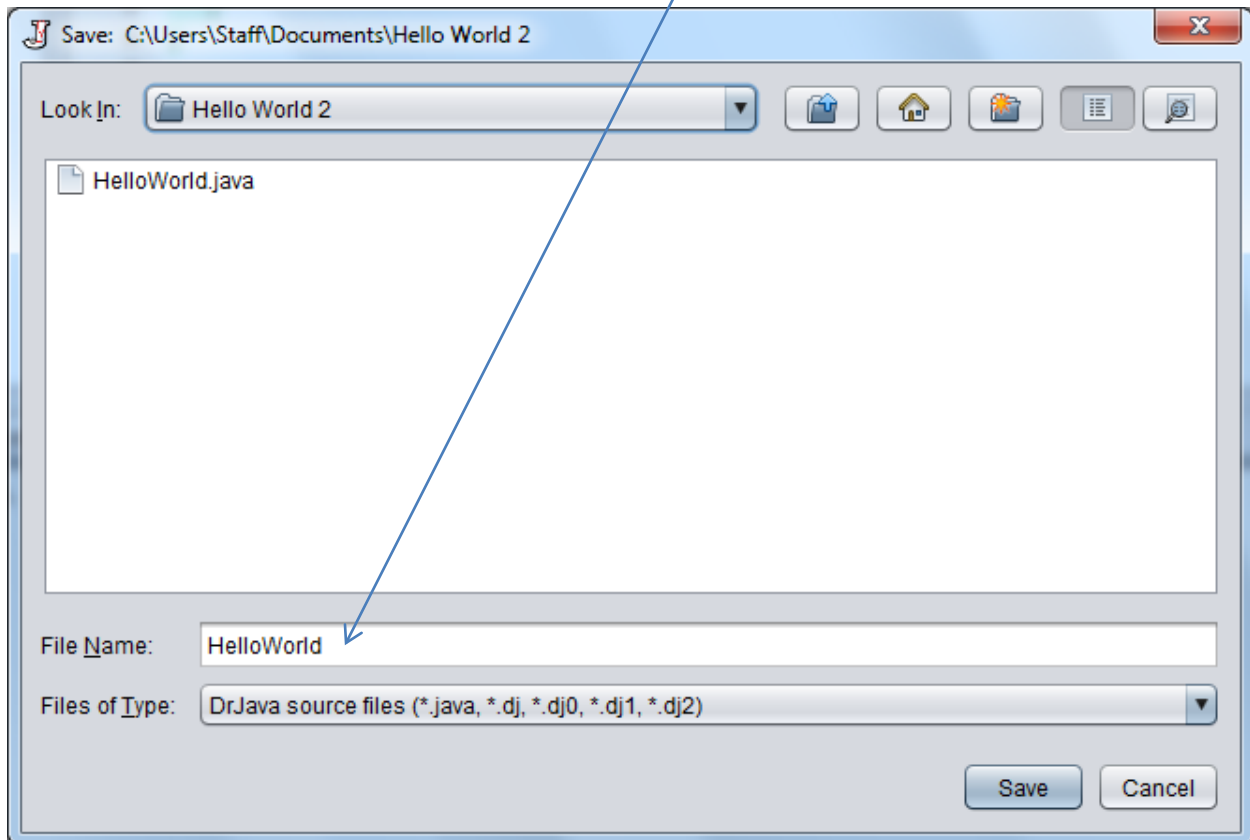
Compile



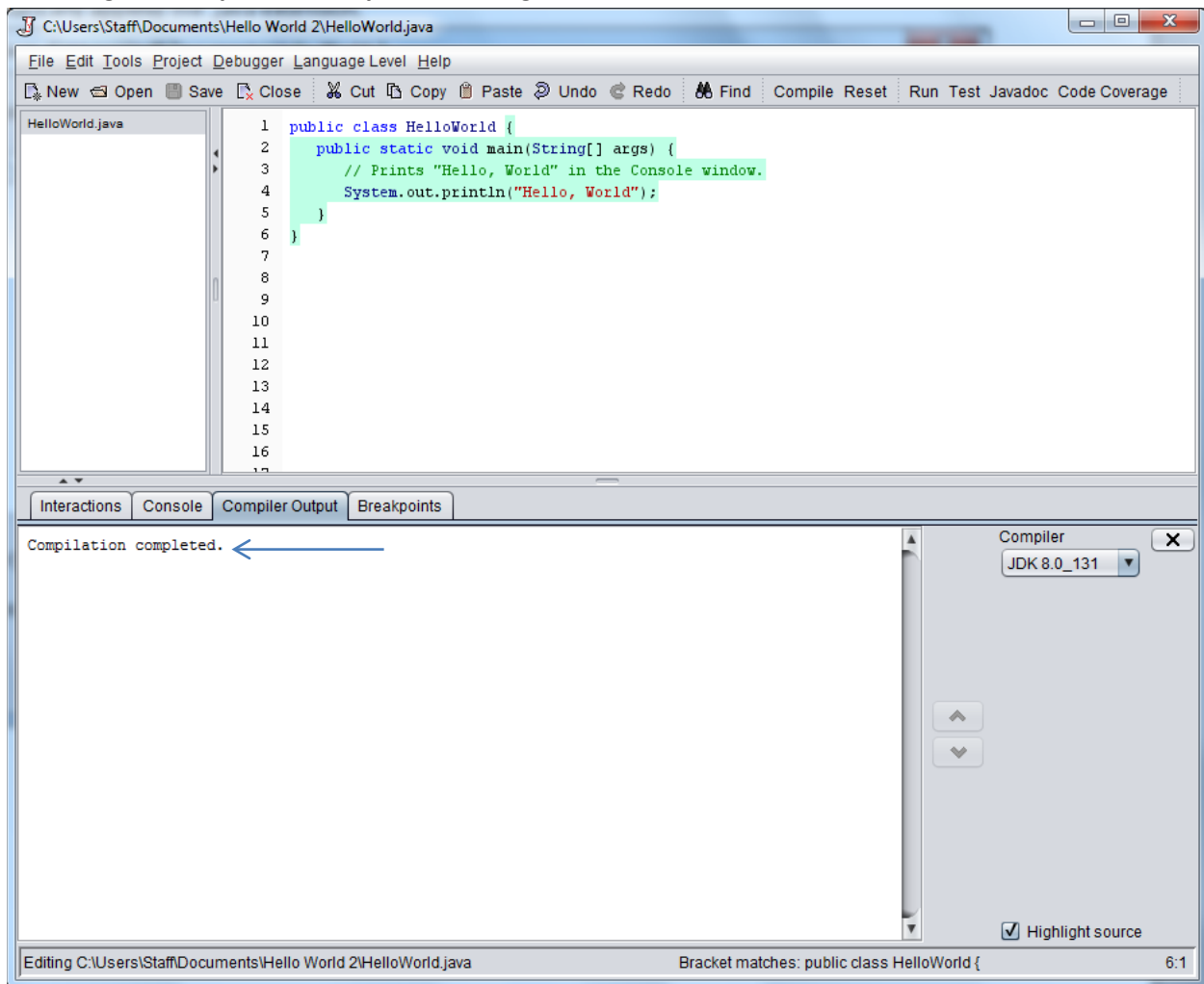
If the first time you are compiling, save the file:



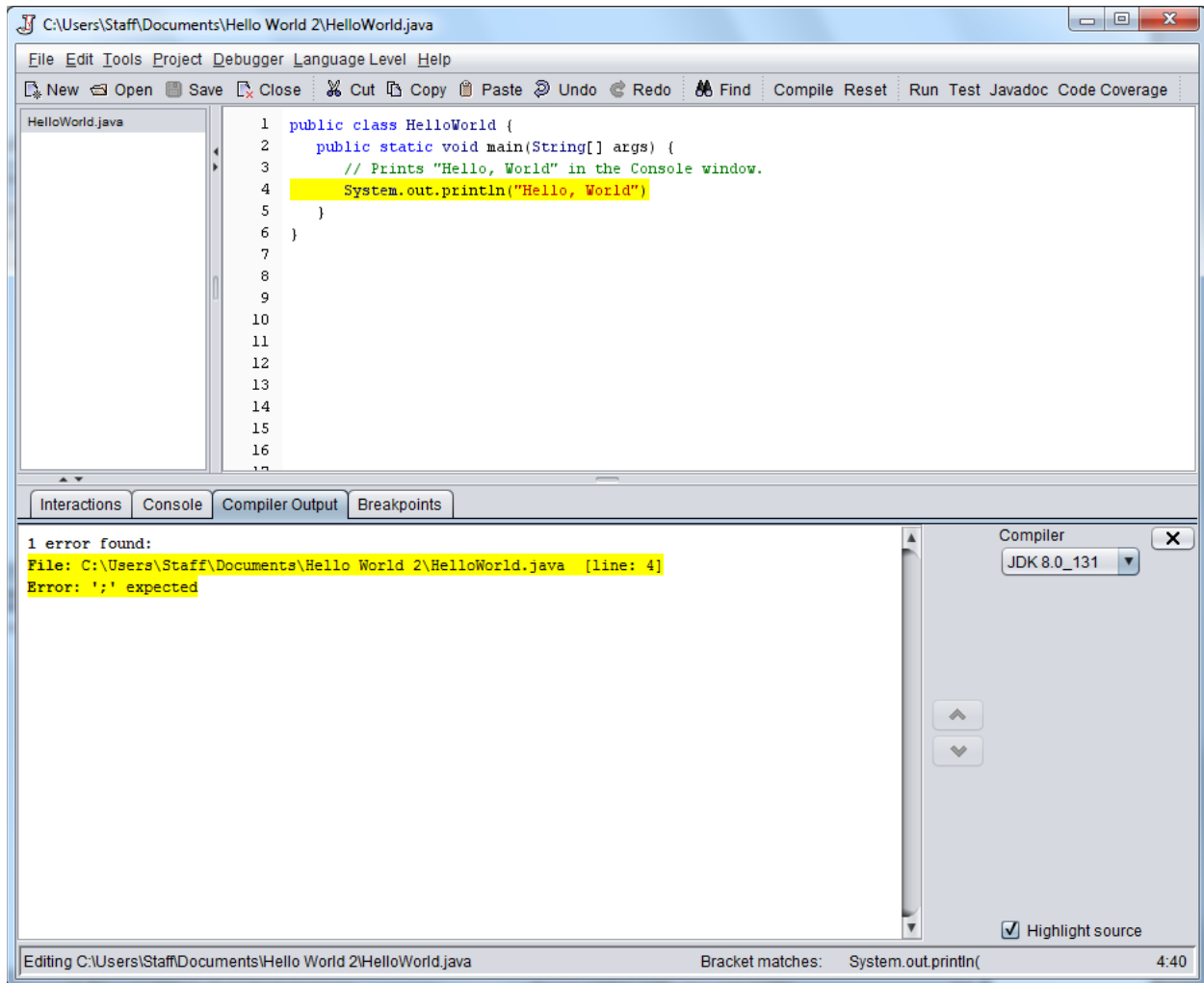
Pick some location to save the file, but just give the file name (without the extension). The program will automatically append the .java extension.



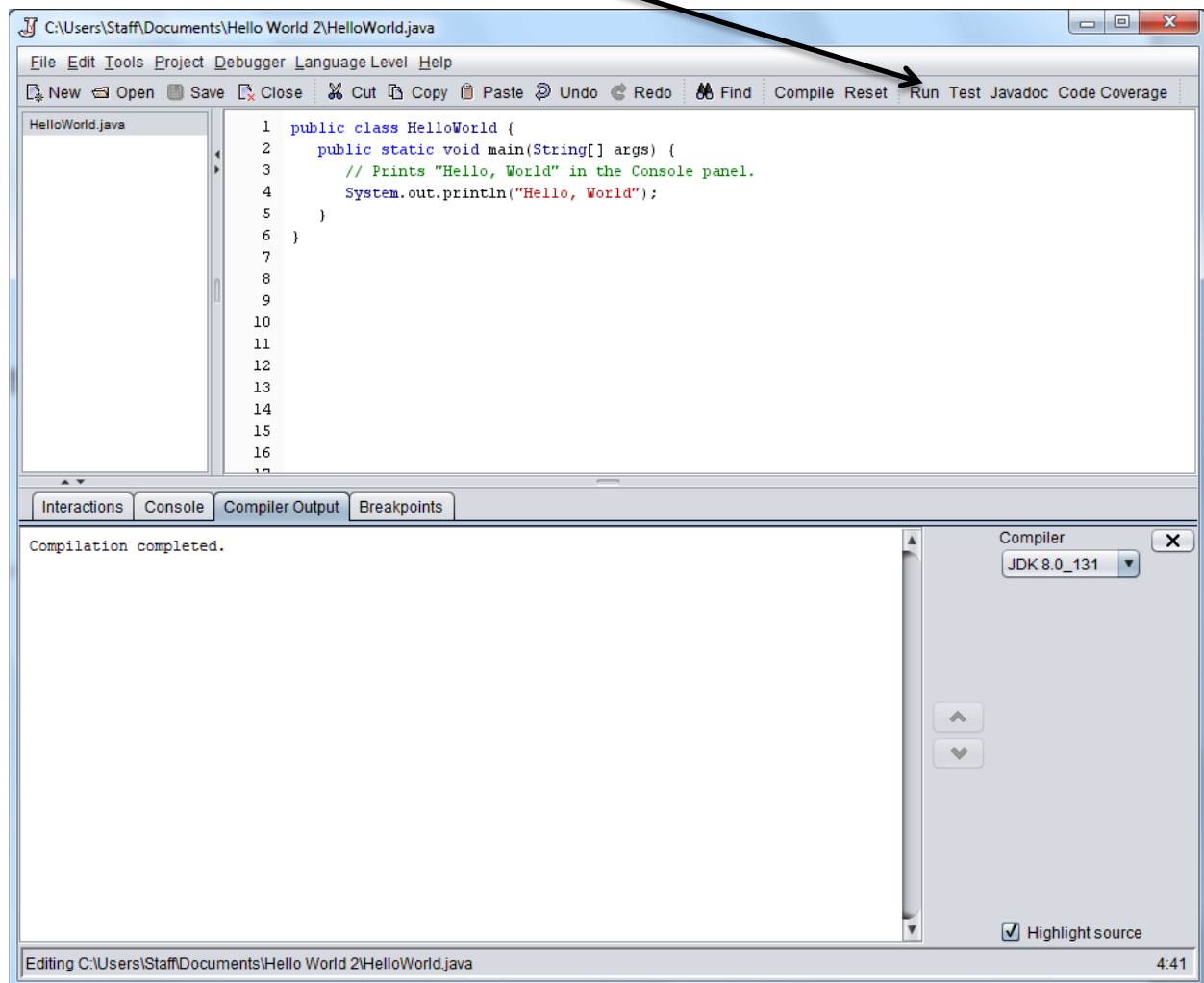
You will get a **Compilation completed** message if no errors are found.



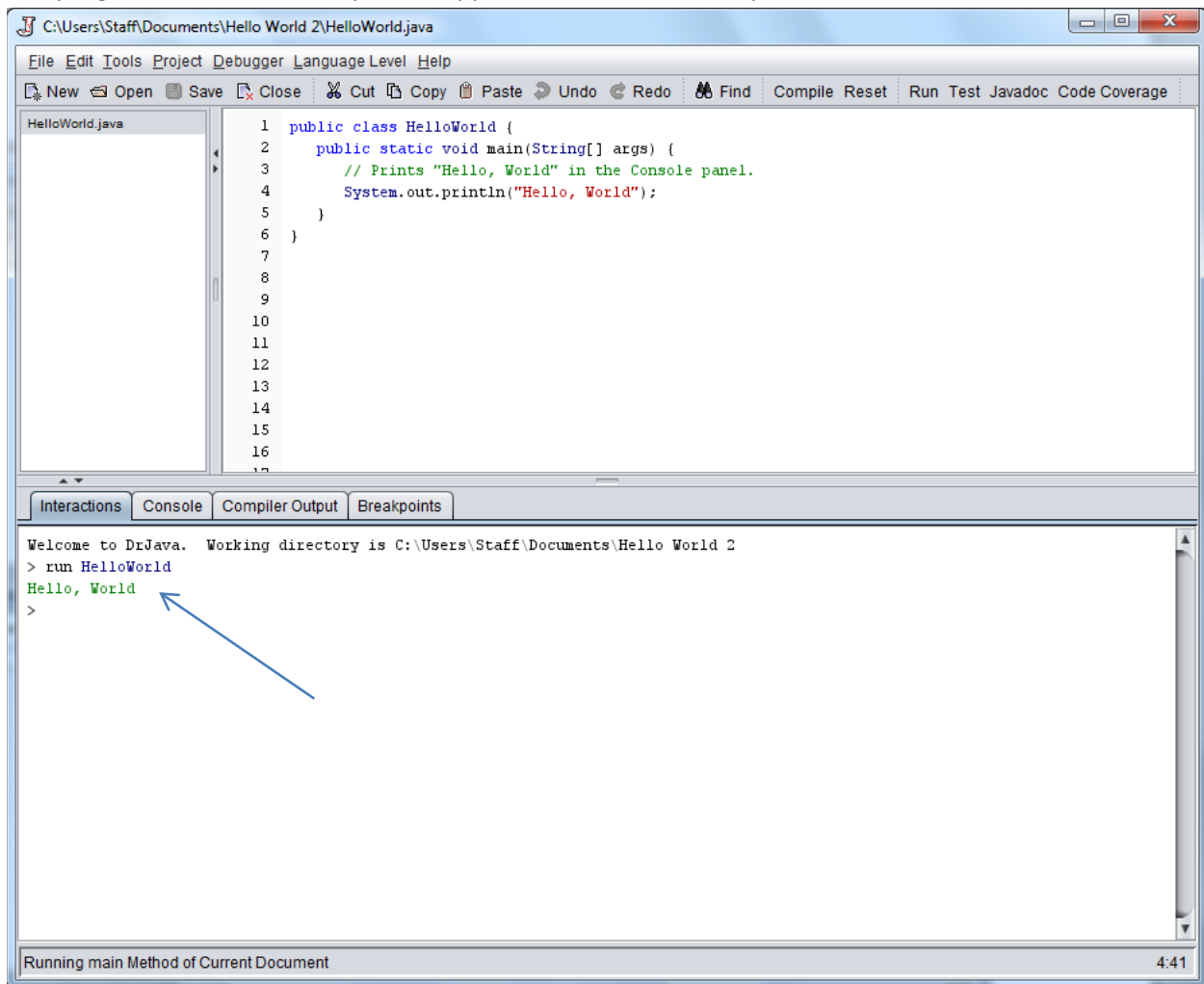
If an error was found it will list the line(s) that the error appears in the Compiler Output panel.



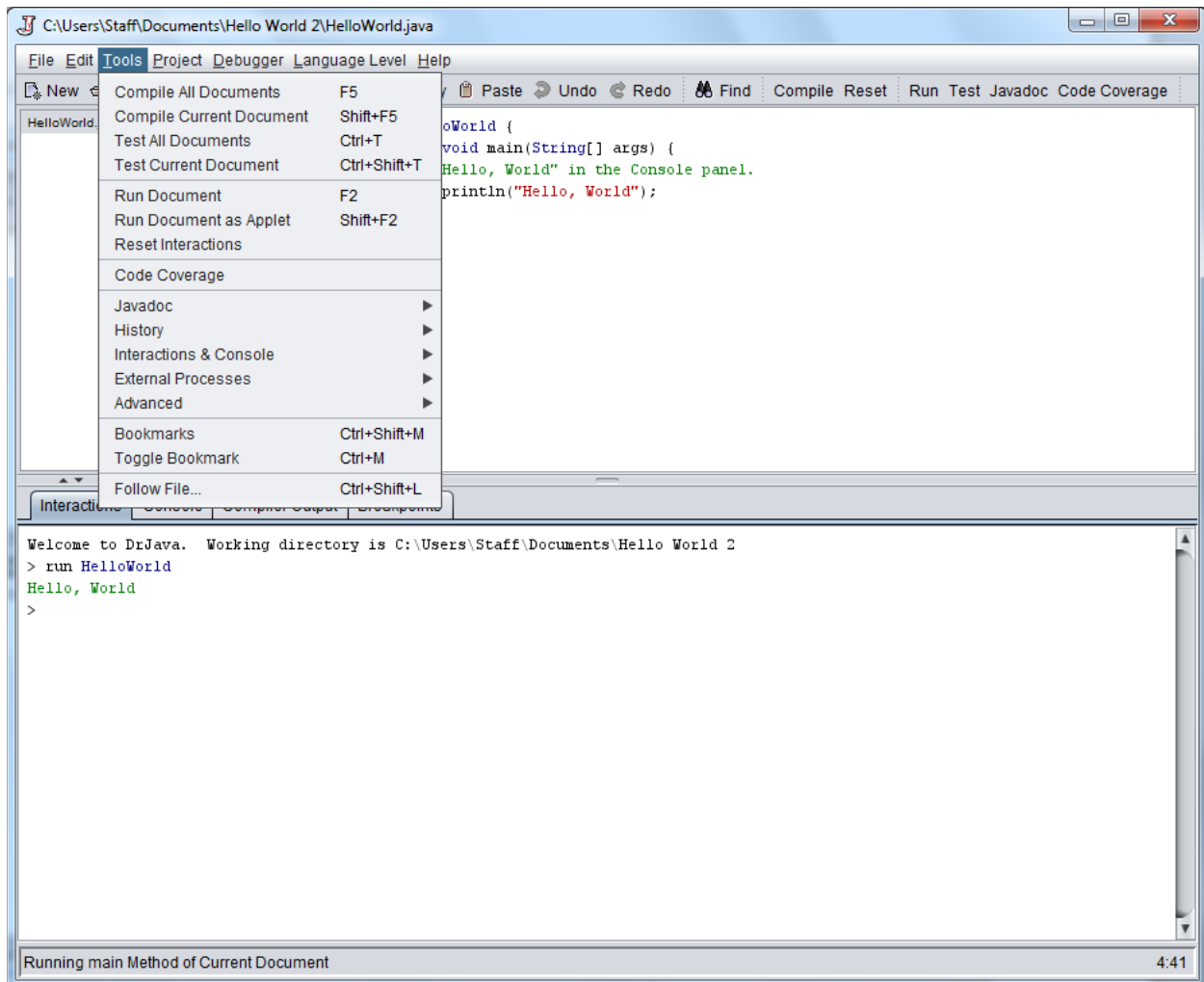
When the compilation completes you can then **Run** the program:



The program runs and the output will appear in the **Interactions** panel.



For your information: The **Tools** menu brings up the **Compile/Run** commands as well as lists the keyboard shortcuts.



Using the Debugger

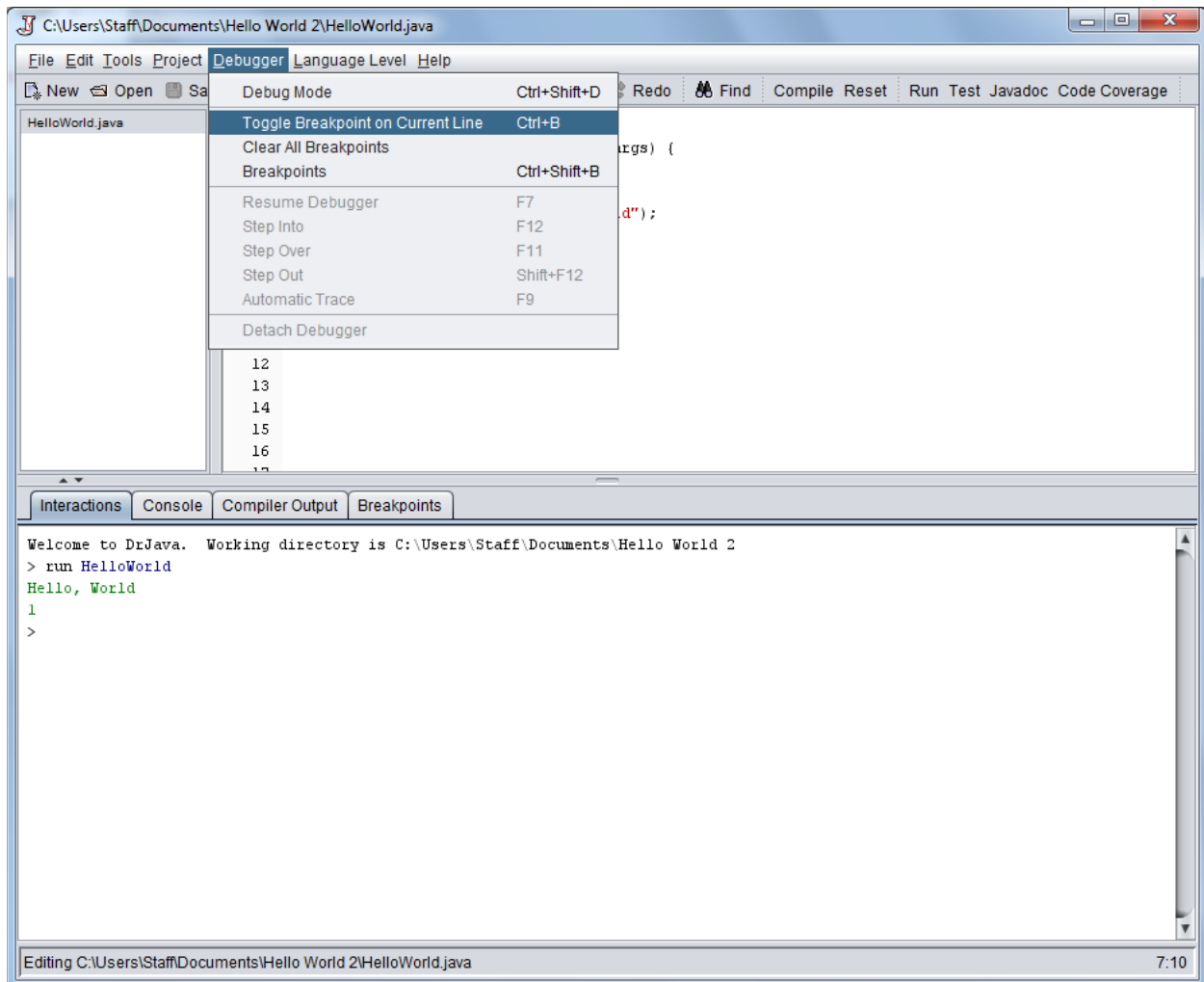
For the debugger, let's use this program:

```
public class HelloWorld {  
  
    public static void main(String[] args) {  
  
        int i=0;  
  
        System.out.println("Hello, World");  
  
        i++;  
  
        System.out.println(i);  
  
    }  
}
```

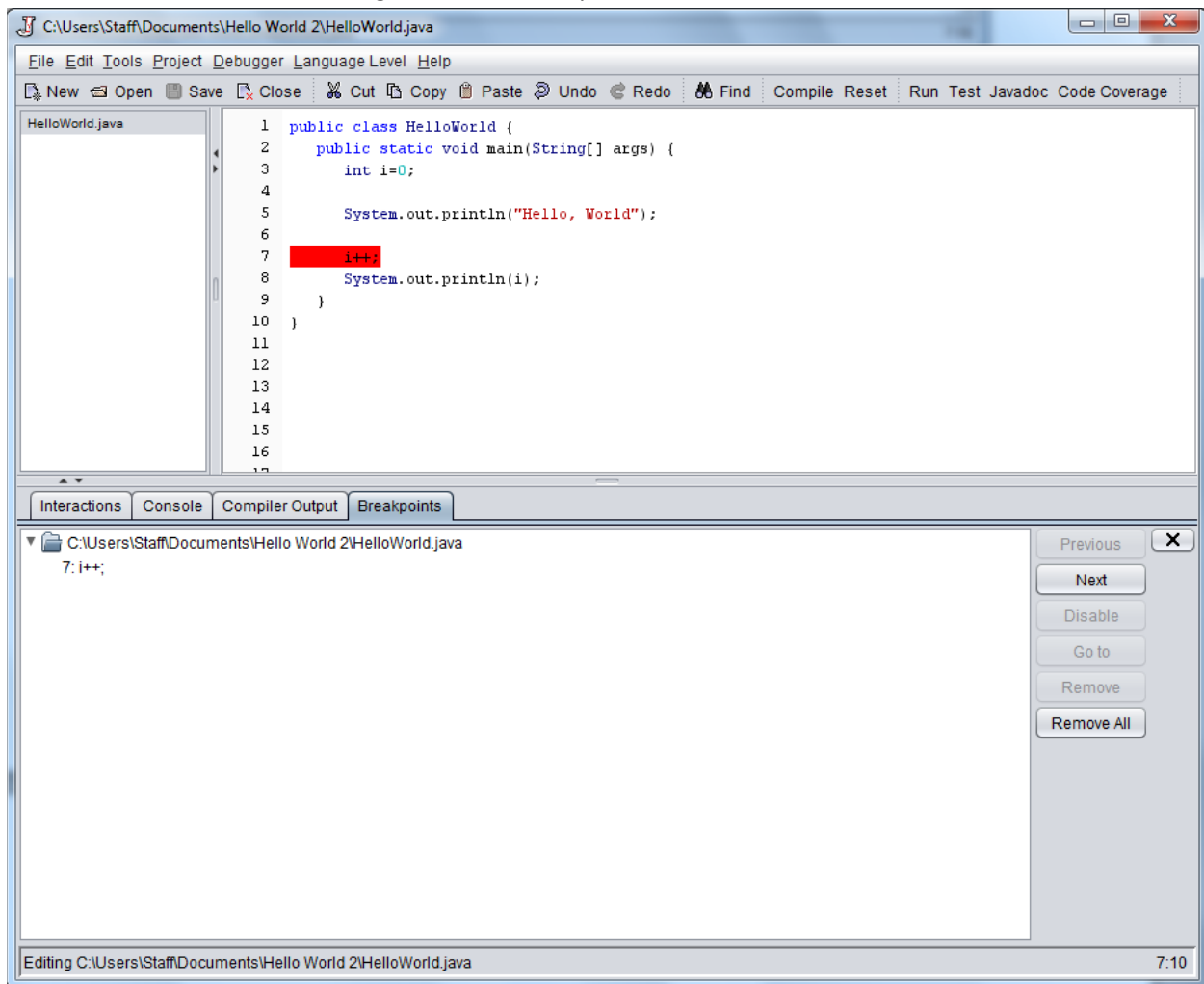
```
1  public class HelloWorld {  
2      public static void main(String[] args) {  
3          int i=0;  
4  
5          System.out.println("Hello, World");  
6  
7          i++;  
8          System.out.println(i);  
9      }  
10 }
```

We will put a line break at line #7.

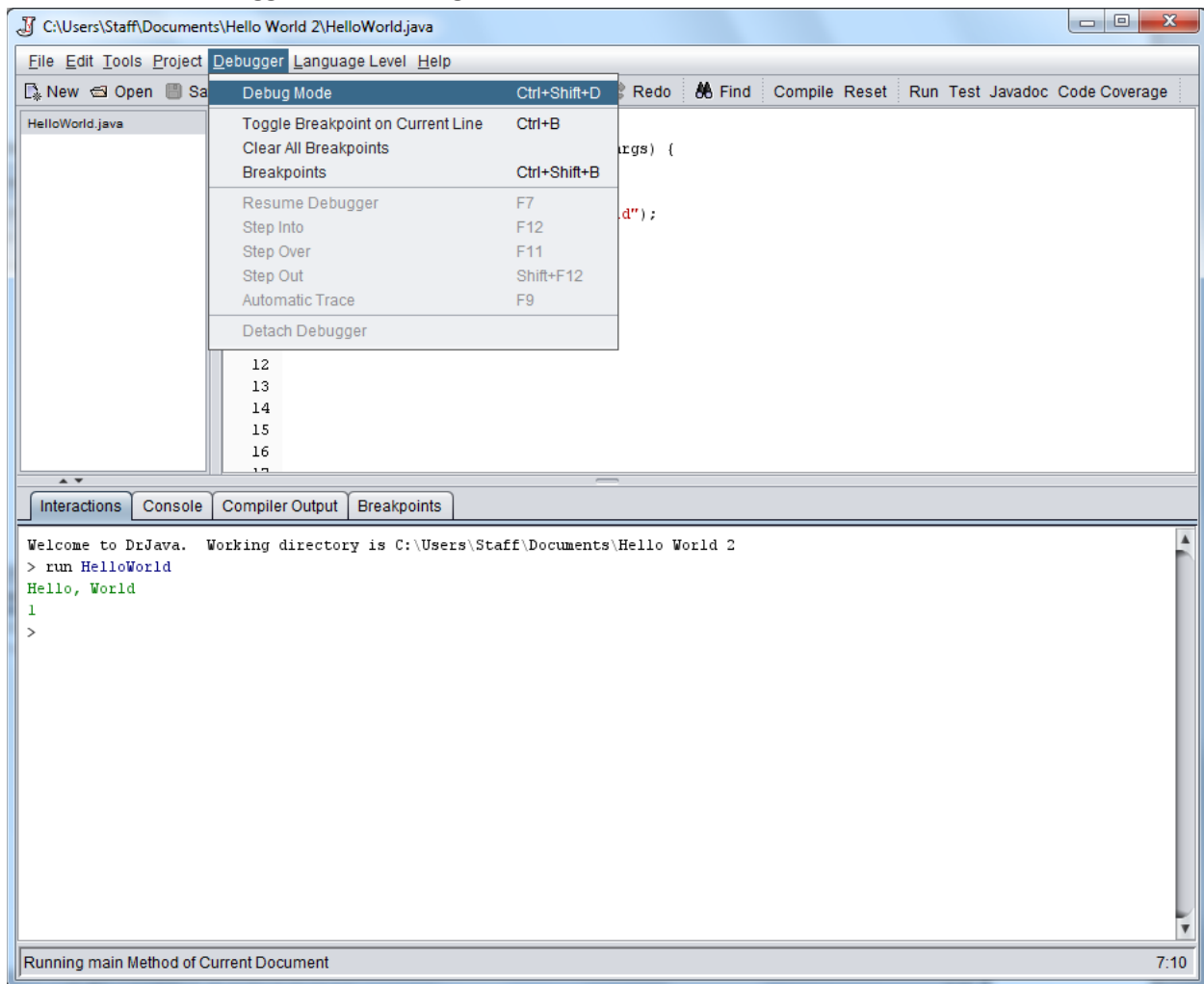
Place the cursor on line #7 and then select from the **Debugger** menu, **Toggle Breakpoint on Current Line**.



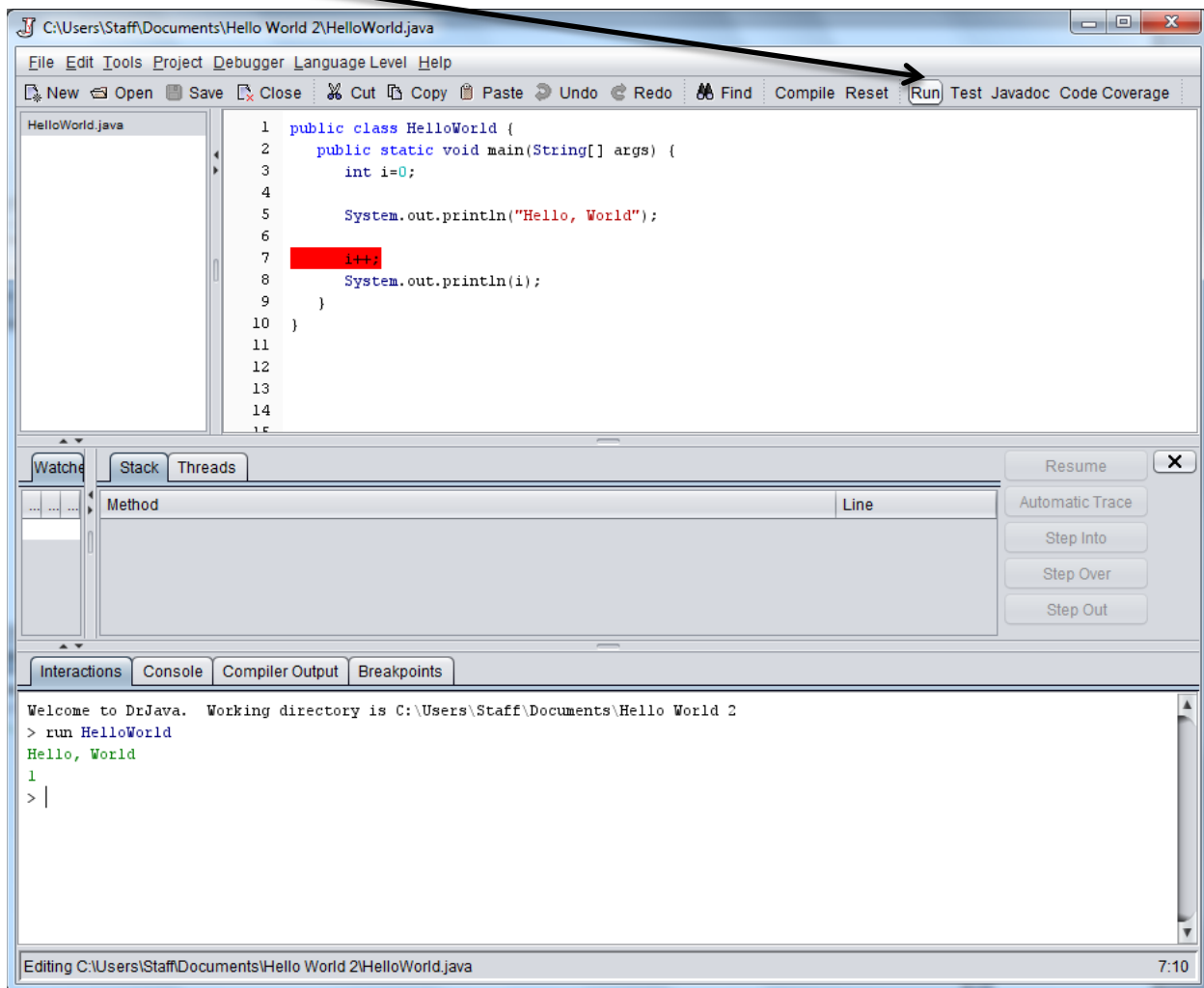
The line Line 7 is in red indicating that it is a breakpoint.



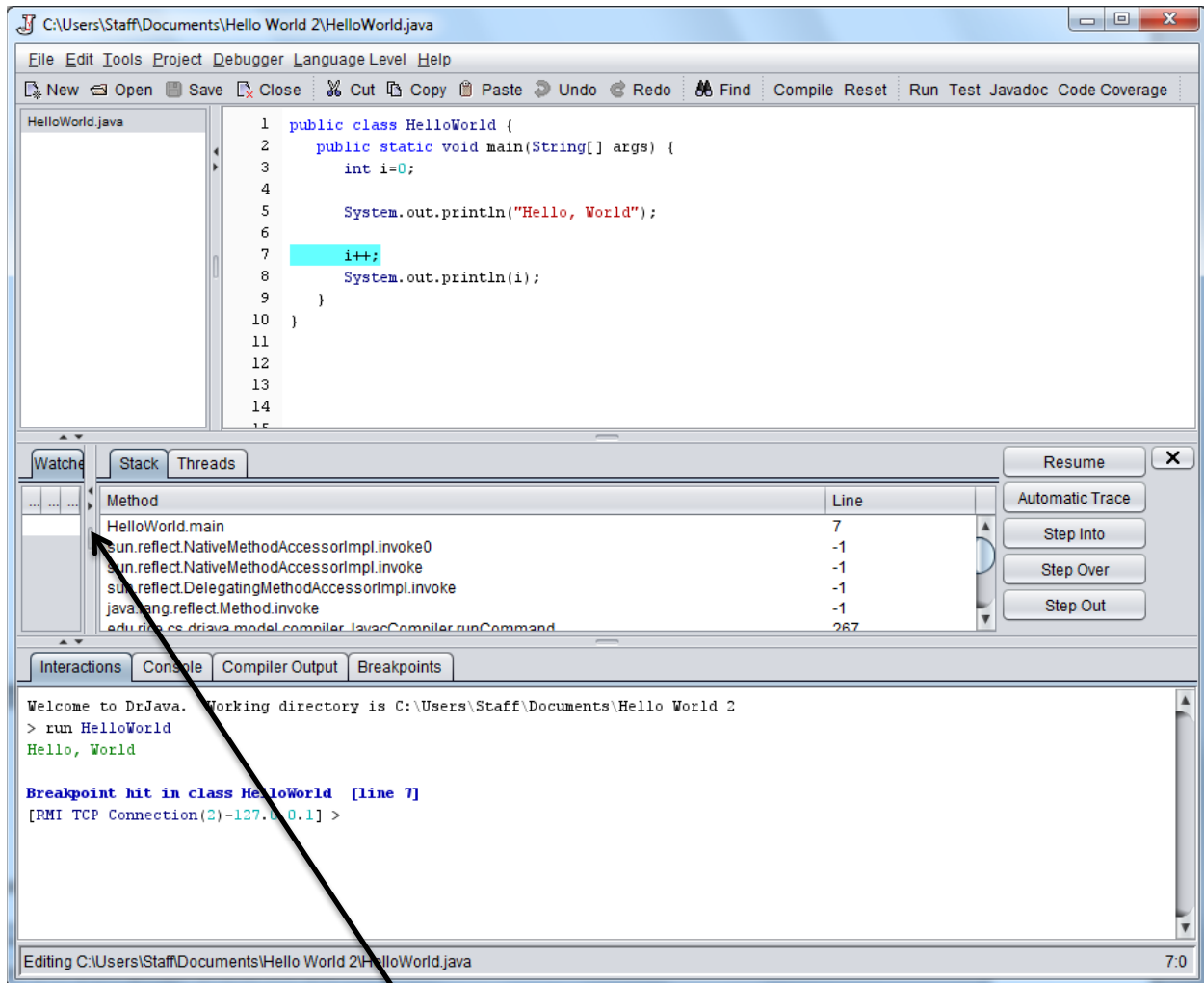
Select from the **Debugger** menu, **Debug Mode**.




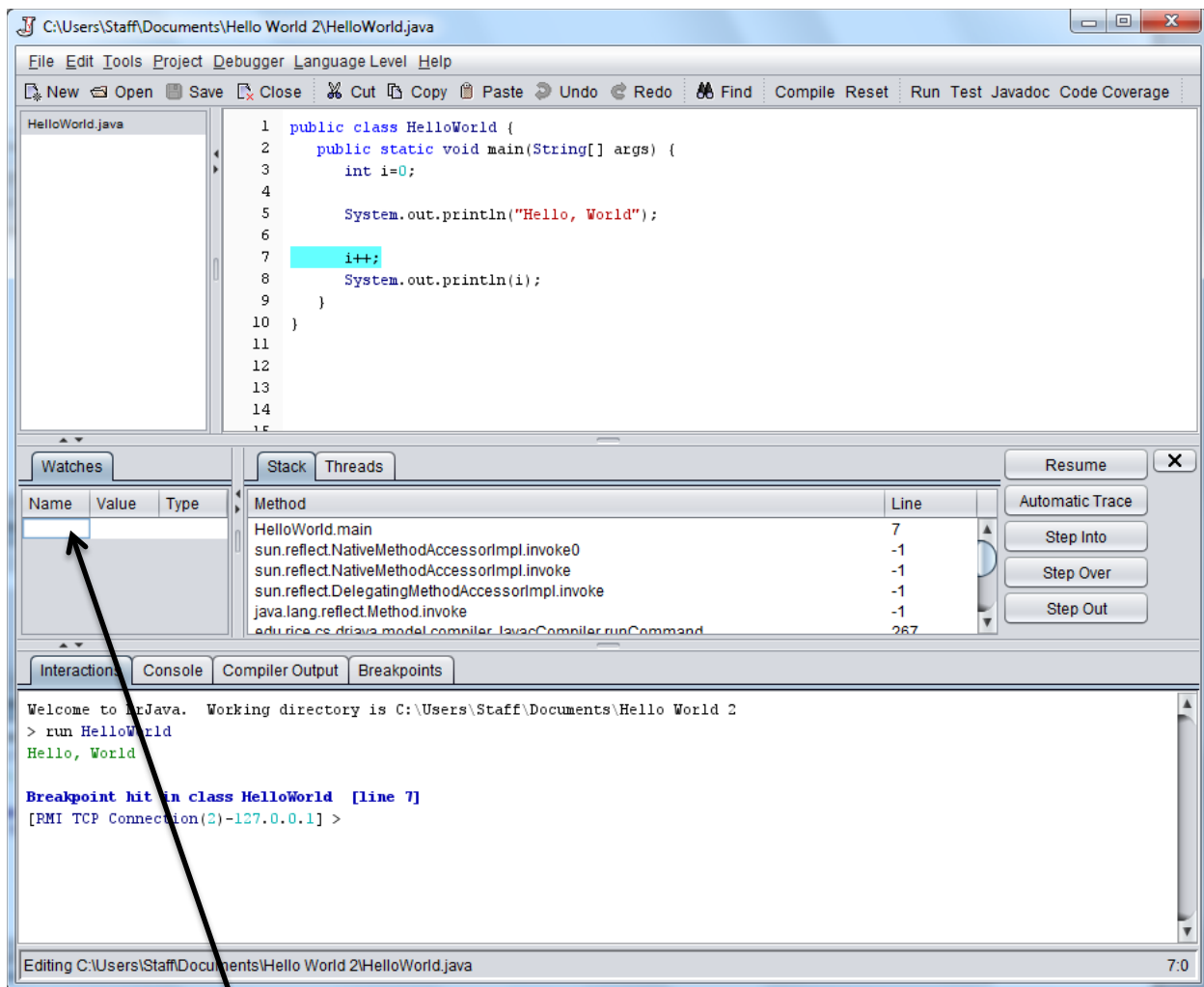
Now select **Run**.



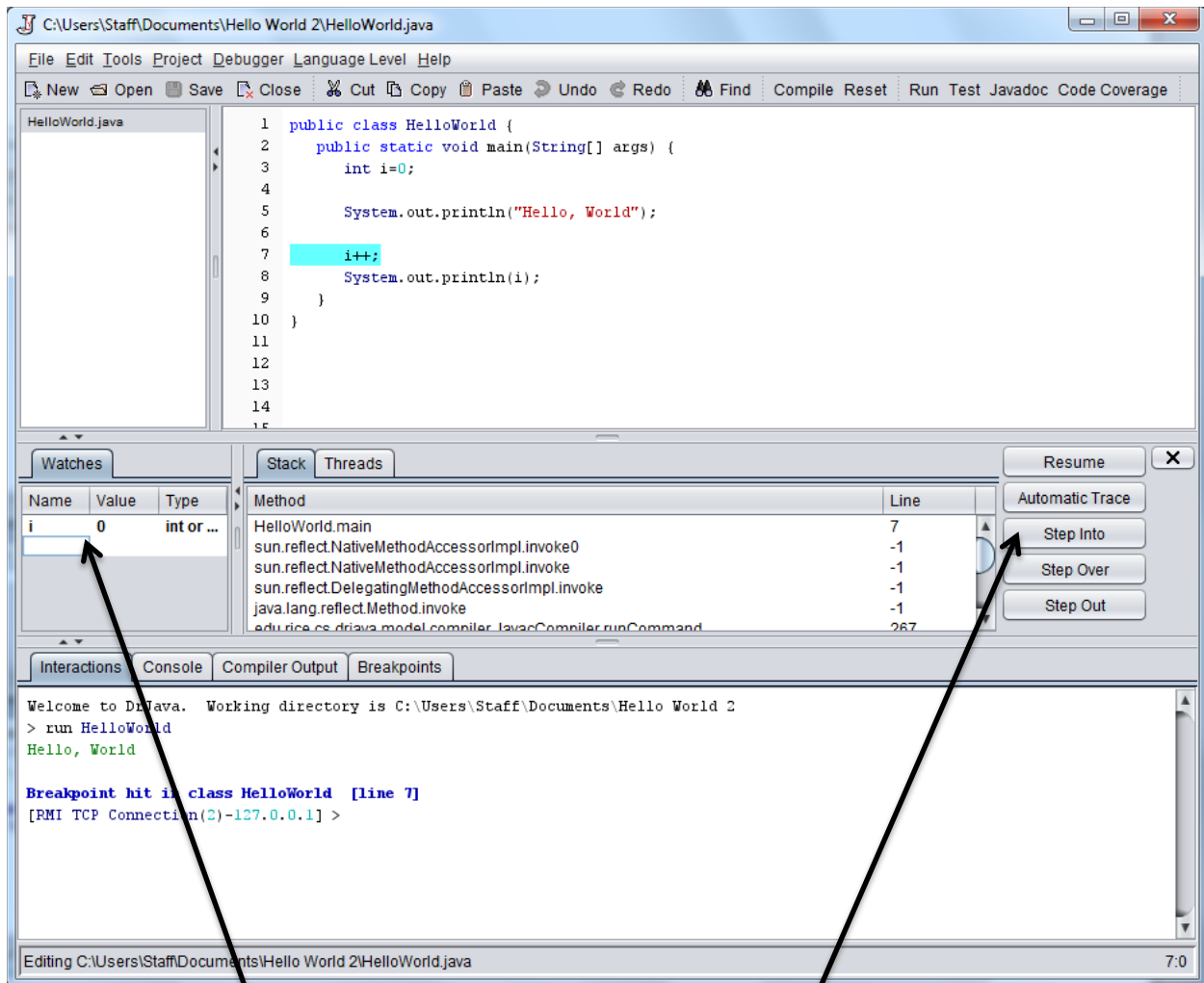
The program breaks at line #7. The program broke “stopped” your program at the break point (line #7).



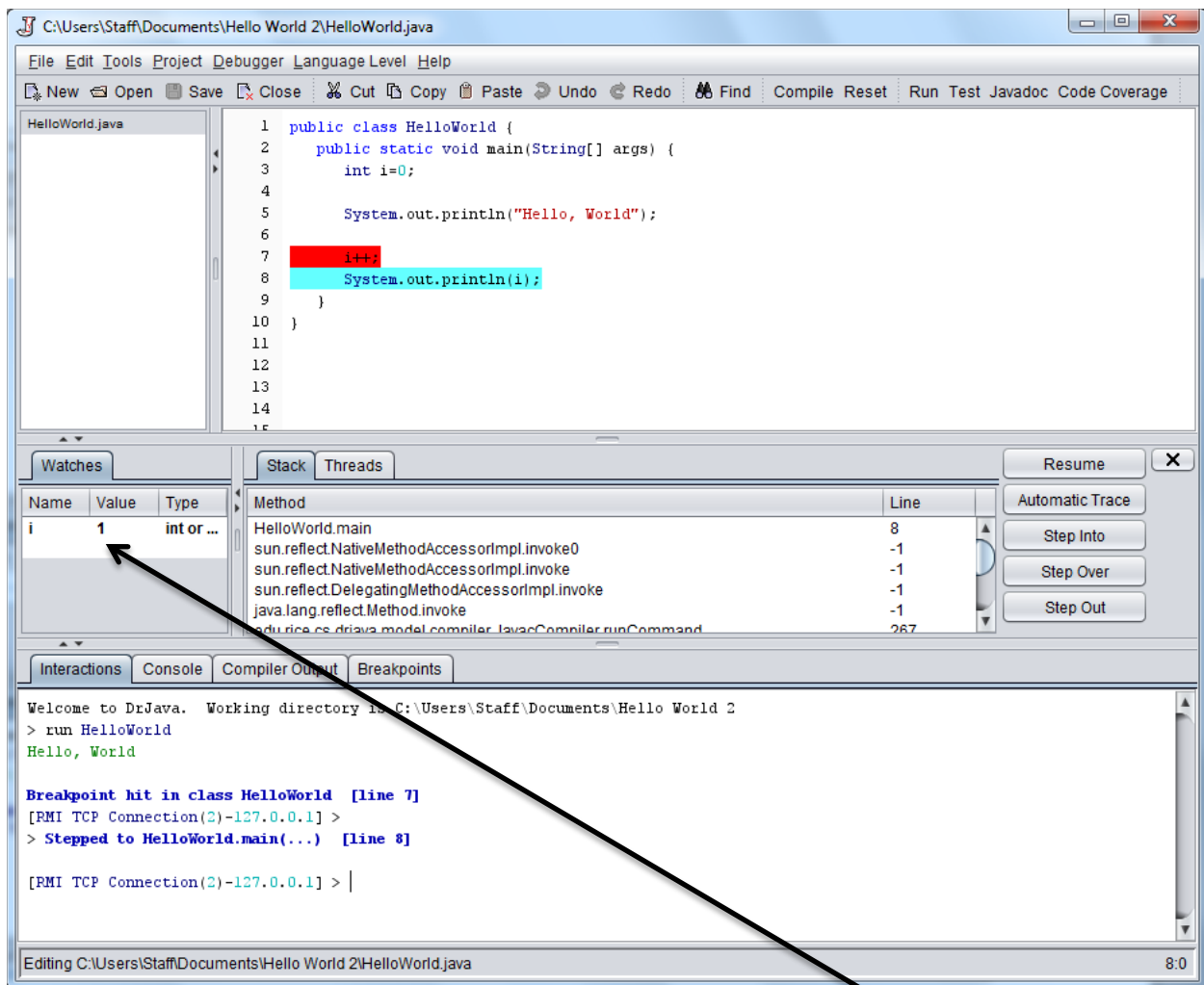
Move the mouse over to the panel divider. The mouse cursor will become a double arrow . Click and drag the panel to allow more room to appear for the Watches to appear.



Now that the **Watches** panel is open, you can type in a name of a variable to watch.

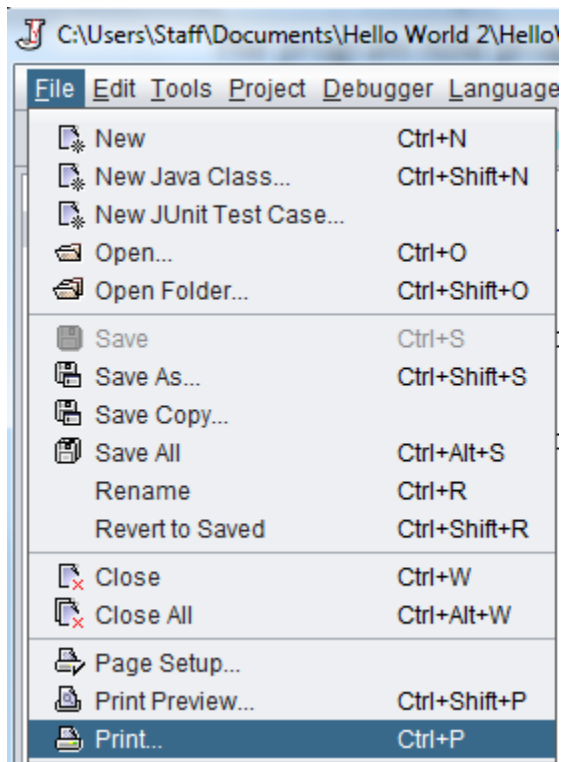


The variable name of `i` is listed and the value is displayed. You can **Step Into** to trace your program.



The program now program executed line #7 and the value of `i` went from 0 to 1.

Printing



From the **File** menu, select **Print**.