

# **Informatik II**

# **Exercise Session**

**25.02.2016**

# Organization

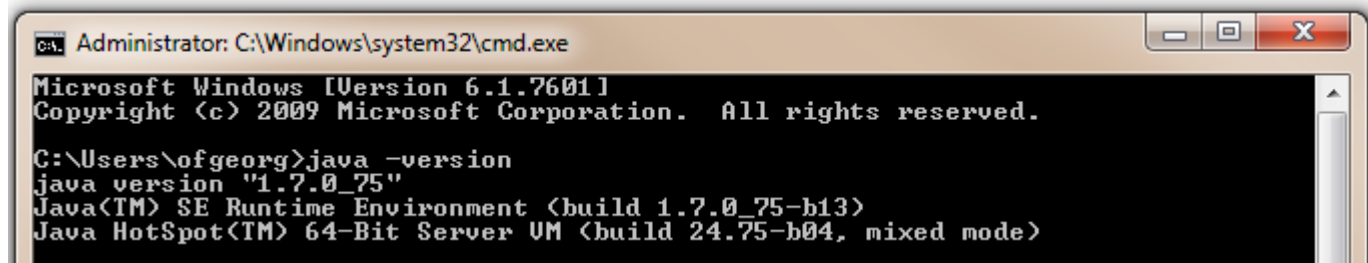
Check homepage

<http://lec.inf.ethz.ch/baug/informatik2/2016/>

Time	Assistant	Mail	Location	Language
Thursday 13-15	Marko Pichler		HIT F 12	deutsch
Thursday 13-15	Andrin Kasper		HIT F 13	deutsch
Thursday 13-15	Giuseppe Accaputo		HIT F 31.1	deutsch
Thursday 15-17	Tobias Verhulst		HCI D 4	deutsch

# Setting up Eclipse

- Make sure you have Java installed



```
Administrator: C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

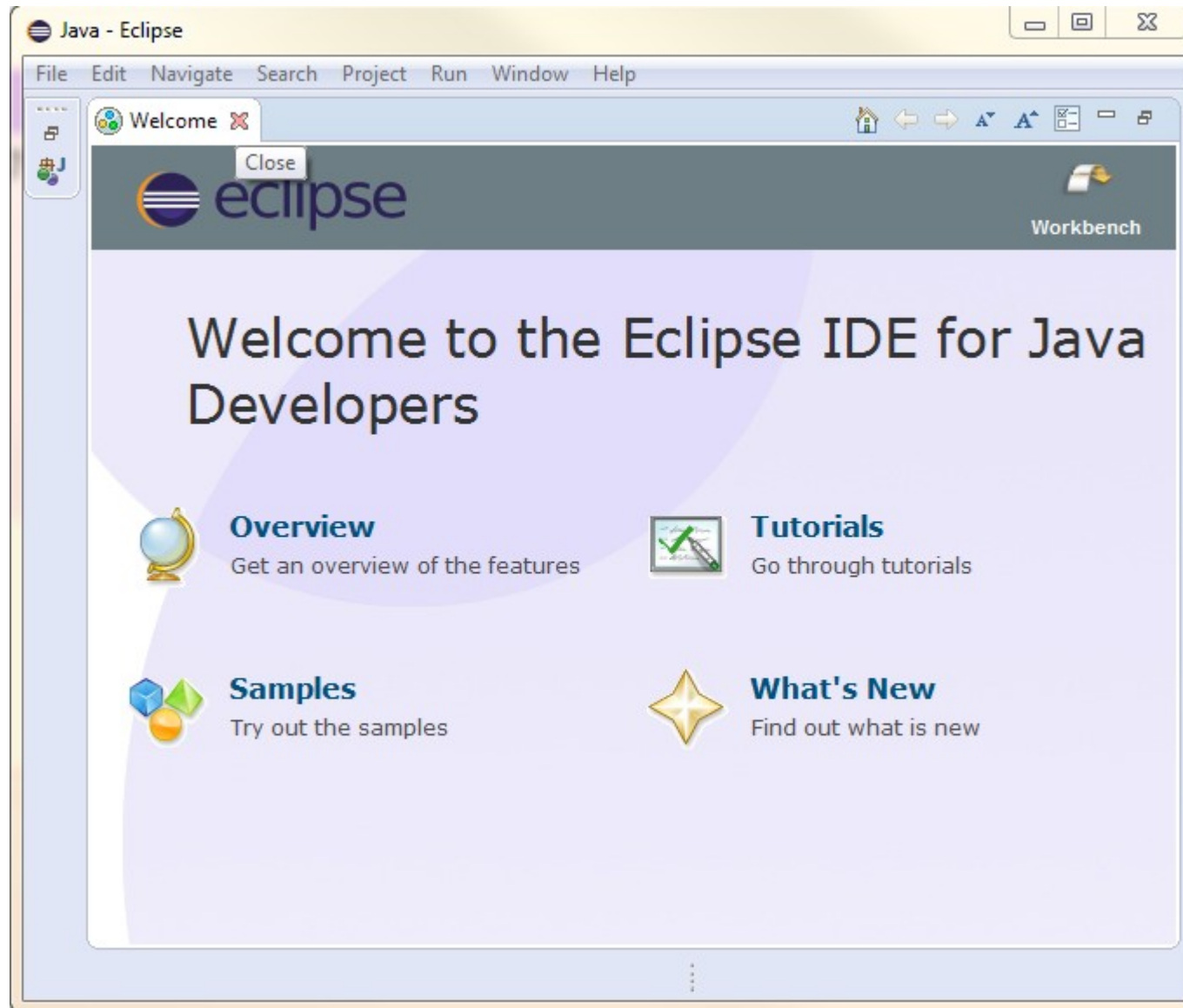
C:\Users\ofgeorg>java -version
java version "1.7.0_75"
Java(TM) SE Runtime Environment (build 1.7.0_75-b13)
Java HotSpot(TM) 64-Bit Server VM (build 24.75-b04, mixed mode)
```

- In case you don't have it yet download and install from:  
[Sun JDK 1.8 Download](#)

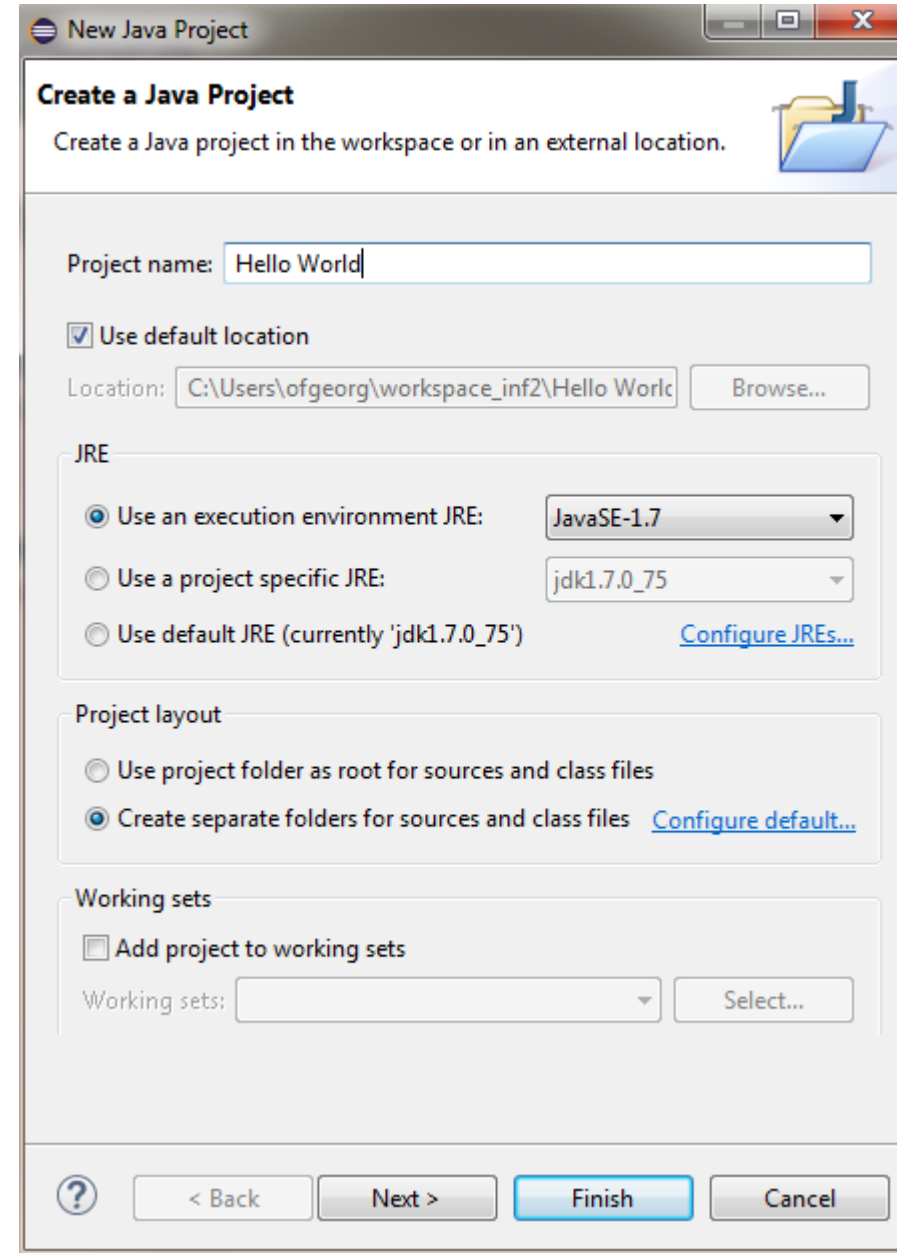
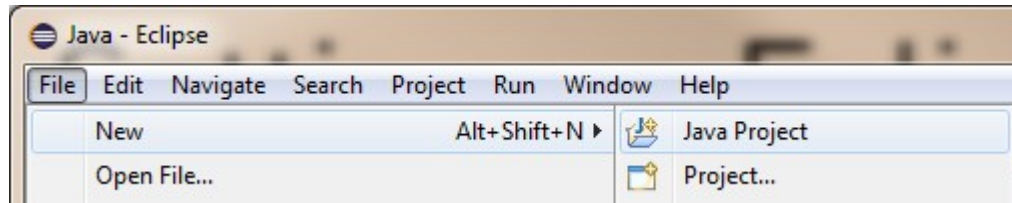
# Setting up Eclipse

The screenshot shows a web browser window with the URL <https://www.eclipse.org/downloads/>. The page features the Eclipse logo and navigation links: GETTING STARTED, MEMBERS, PROJECTS, and MORE. A prominent orange DOWNLOAD button is visible. Below the navigation, there's a breadcrumb trail: HOME / DOWNLOADS > Packages > Developer Builds > Java™ 8 Support. A yellow security release banner mentions a vulnerability in JGit client (CVE-2014-9390). The main content area displays the Eclipse Luna SR1a (4.4.1) Release for Windows. The primary download option is 'Eclipse IDE for Java Developers' (154 MB), which has been downloaded 1,366,323 times. A description states it includes a Java IDE, CVS client, Git client, XML Editor, Mylyn, and Maven integration. A download icon is present next to the text 'Windows 32 Bit', 'Windows 64 Bit', and 'Bit'. To the right, there's a promotional banner for 'eclipsecon 2015' (March 9-12, 2015) with a 'Register Now' button. Below the download options, a 'RELATED LINKS' section lists 'Compare & Combine', 'Install Guide', and 'Documentation'. A tooltip is visible over the 'Windows 64 Bit' link, containing the text 'Download Eclipse IDE for Java Developers Windows 64 Bit'. The browser's address bar shows a partial URL: <https://www.eclipse.org/downloads/download.php?file=/technolog...>

# Setting up Eclipse



# First Project



# First Project

**New Java Class**

**Java Class**

The use of the default package is discouraged.

Source folder: Hello World/src

Package:  (default)

Enclosing type:

Name: Hello

Modifiers:  public  package  private  protected  
 abstract  final  static

Superclass: java.lang.Object

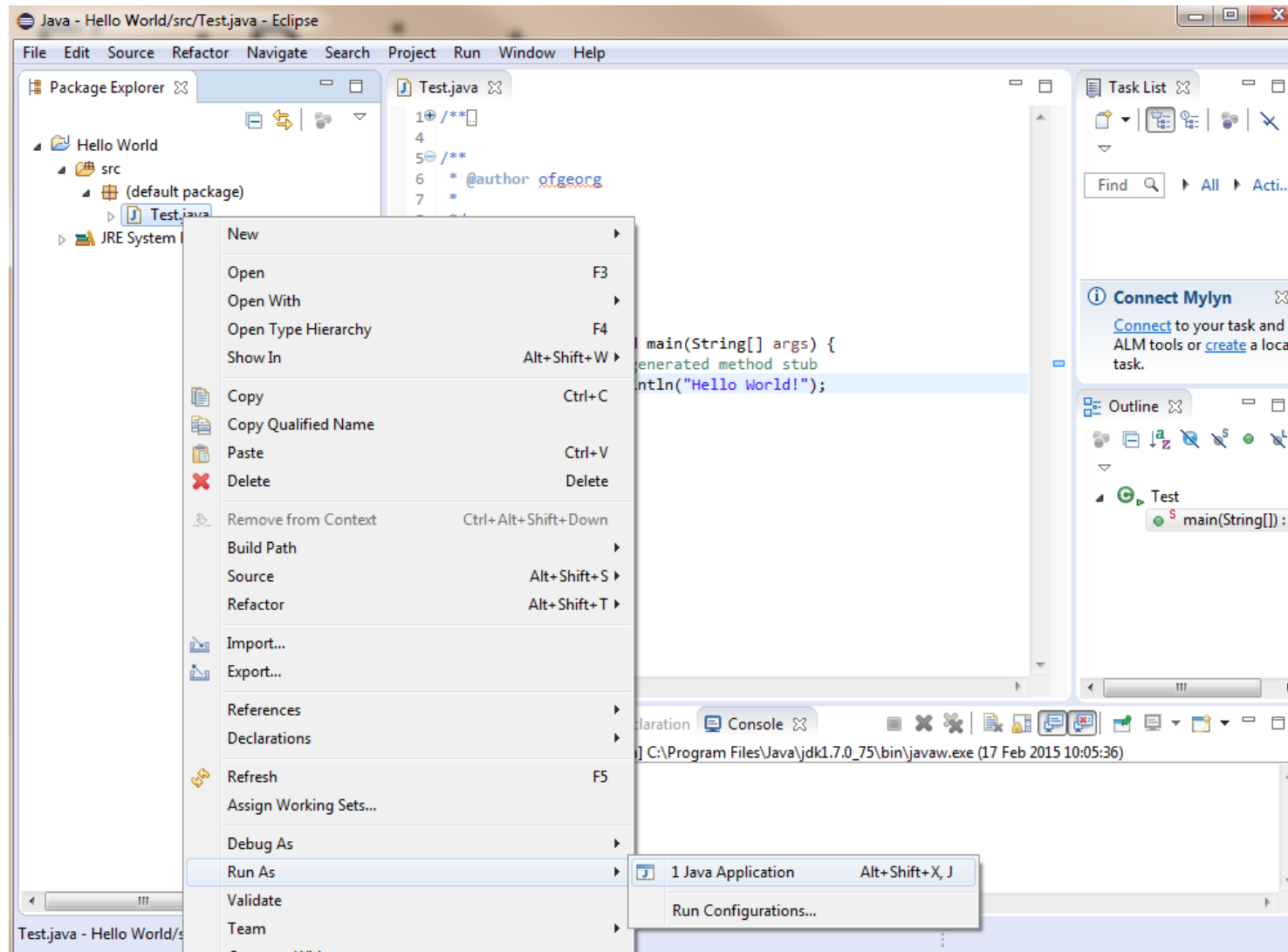
Interfaces:

Which method stubs would you like to create?

public static void main(String[] args)  
 Constructors from superclass  
 Inherited abstract methods

Do you want to add comments? (Configure templates and default value [here](#))  
 Generate comments

# First Project

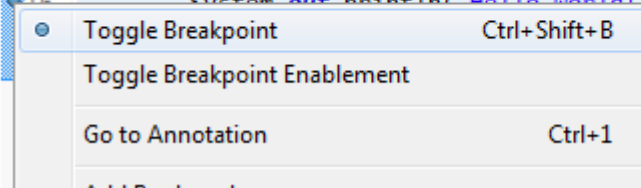




# Debugging

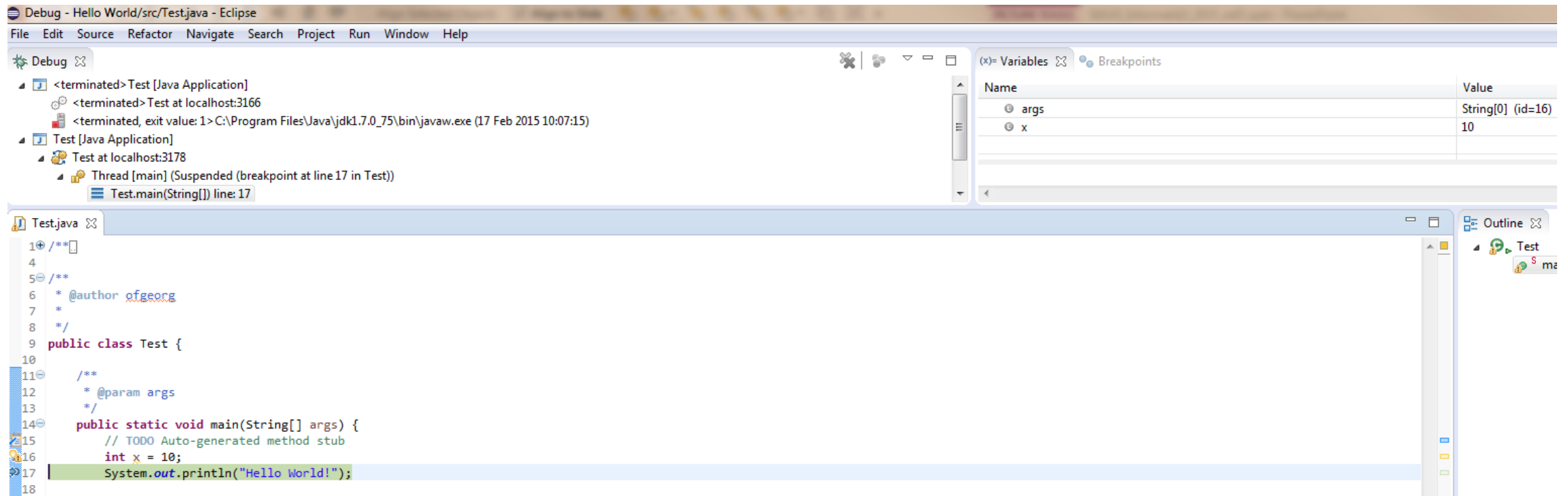
```
11-  /**
12-   * @param args
13-   */
14-   public static void main(String[] args) {
15-       // TODO Auto-generated method stub
16-       System.out.println("Hello World!");

```



A context menu is displayed over the code, listing the following options:

- Toggle Breakpoint (Ctrl+Shift+B)
- Toggle Breakpoint Enablement
- Go to Annotation (Ctrl+1)
- Add Bookmark

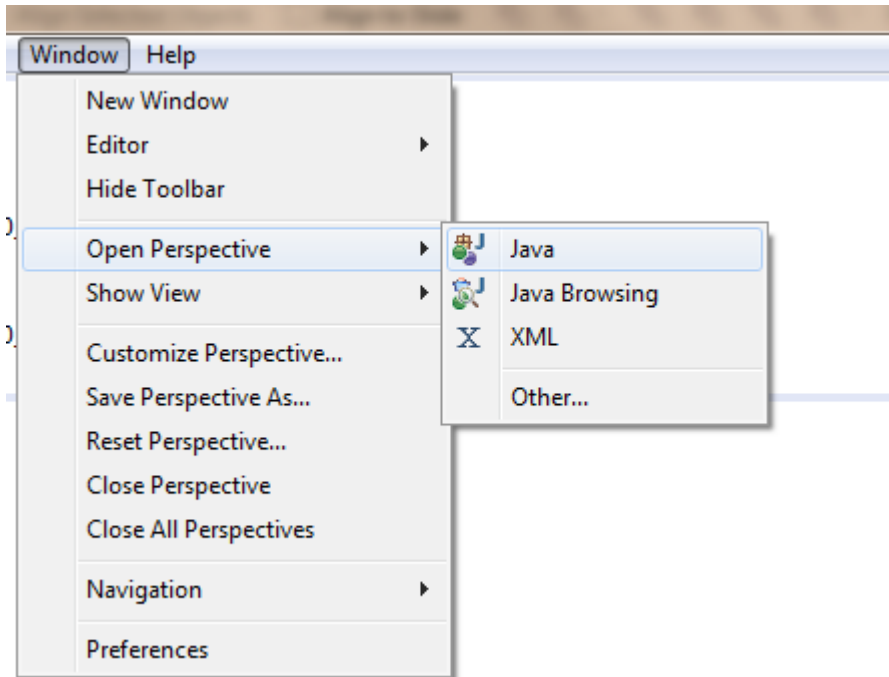


The screenshot shows the Eclipse IDE interface during a debug session. The top menu bar includes File, Edit, Source, Refactor, Navigate, Search, Project, Run, Window, and Help. The main workspace is divided into several panes:

- Debug Console:** Shows a list of terminated tests and a current test at localhost:3178. The thread [main] is suspended at line 17 in Test.
- Variables View:** Displays the current state of variables:

Name	Value
args	String[0] (id=16)
x	10
- Source Editor:** Shows the source code for Test.java. Line 17, `System.out.println("Hello World!");`, is highlighted in green, indicating the current execution point.
- Outline View:** Shows the project structure with the current test selected.

# Perspectives and dealing with Errors



```
14 public static void main(String[] args) {  
15     // TODO Auto-generated method stub  
16     int x = 10;  
17     System.out.println("Hello World!");  
18  
19 }  
20  
21 }  
22
```

The image shows a code editor window with a Java class. The code is as follows:

```
public static void main(String[] args) {  
    // TODO Auto-generated method stub  
    int x = 10;  
    System.out.println("Hello World!");  
  
}
```

Line 17, `System.out.println("Hello World!");`, is highlighted in blue and has a red error icon next to it. A tooltip is displayed over the error, containing the following text:

The method `println(String)` is undefined for the type `PrintStream`

3 quick fixes available:

- Change to `'print(...)'`
- Change to `'println(...)'`
- Add cast to `'System.out'`

Press 'F2' for focus

# Using the Judge

- [Exercise 1](#)
- [Submission Website](#)