COMP 248 – Winter 2016

Tutorial 1

Getting started in the lab

- Get your computer account from ENCS help desk (H-960)
  - Note that computer science students will keep their account throughout their studies; but non-computer science students will have their account closed at the end of the semester.
- Login using your user account and password, and change your password from the ENCS helpdesk website: https://fis.encs.concordia.ca/helpdesk-cgi/ch-own-pwd.cgi

Java Installation

- **Download Java (Java SE 8u25)**
  - For Windows and Linux, visit the website: http://www.oracle.com/technetwork/java/javase/downloads/index.html (This is not needed for Mac OS X, since it is already built in).
  - Select **Download JDK and JRE for windows platform**. (On Windows, you will need admin privileges.). Once the download is complete, install java by clicking on the file you downloaded. This will lead you through the installation process.
  - Check the following website if you do not know whether the OS of your machine is 64 or 32 bits http://www.stata.com/support/faqs/windows/64-bit-compliance/

Download and install Java

Download and install Java

Path Configuration

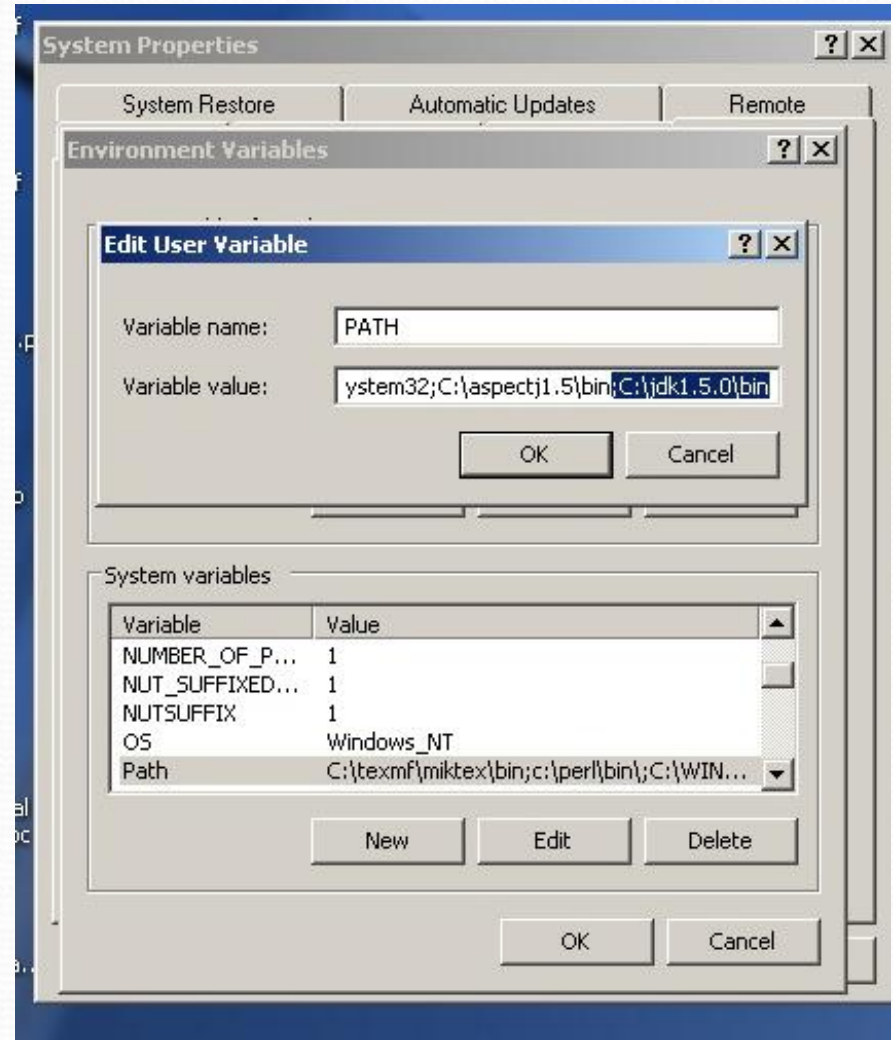- Right click on MyComputer
  - → Properties
  - → Advanced
  - → Environment Variables
  - → Select PATH
  - → Edit
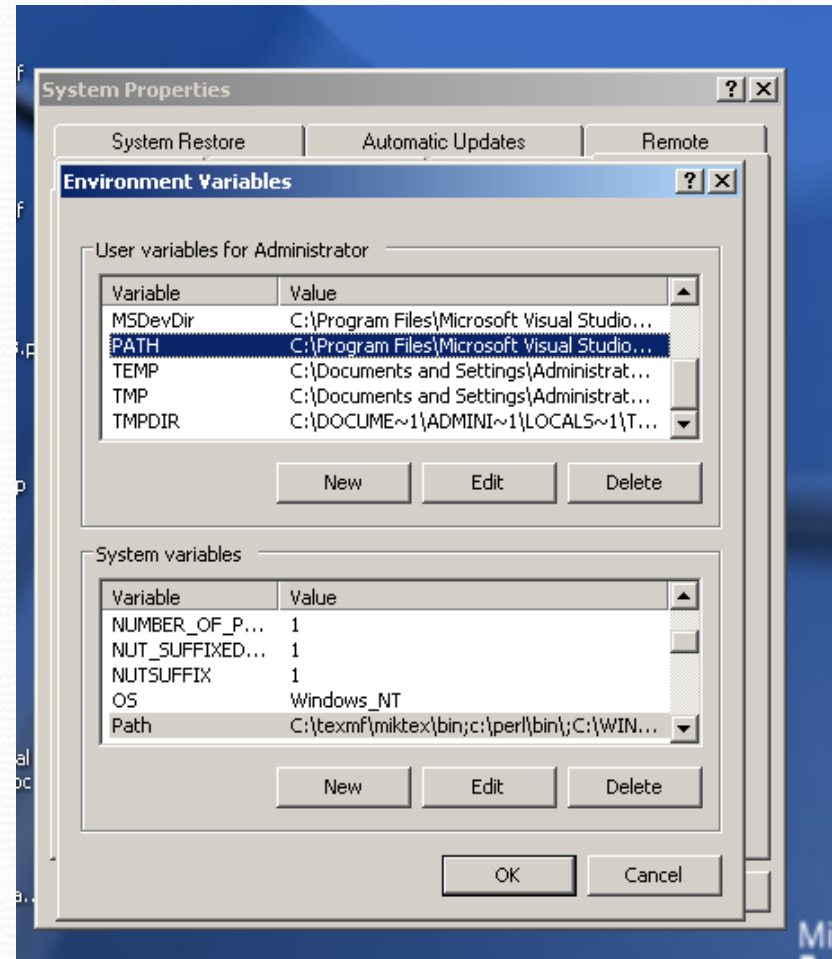
Path Configuration

- Add the path ";C:\Program Files\Java\jdk1.7.0\bin" at the place of highlighted line

- Press Ok

- Redo the same for Path in System variables

Check if JDK is Installed Properly!

Compile and Run a Java Program

- There are two ways to compile and run a Java program:

  - Using command line
  - Through a Development Editor like Eclipse

Example of Java program

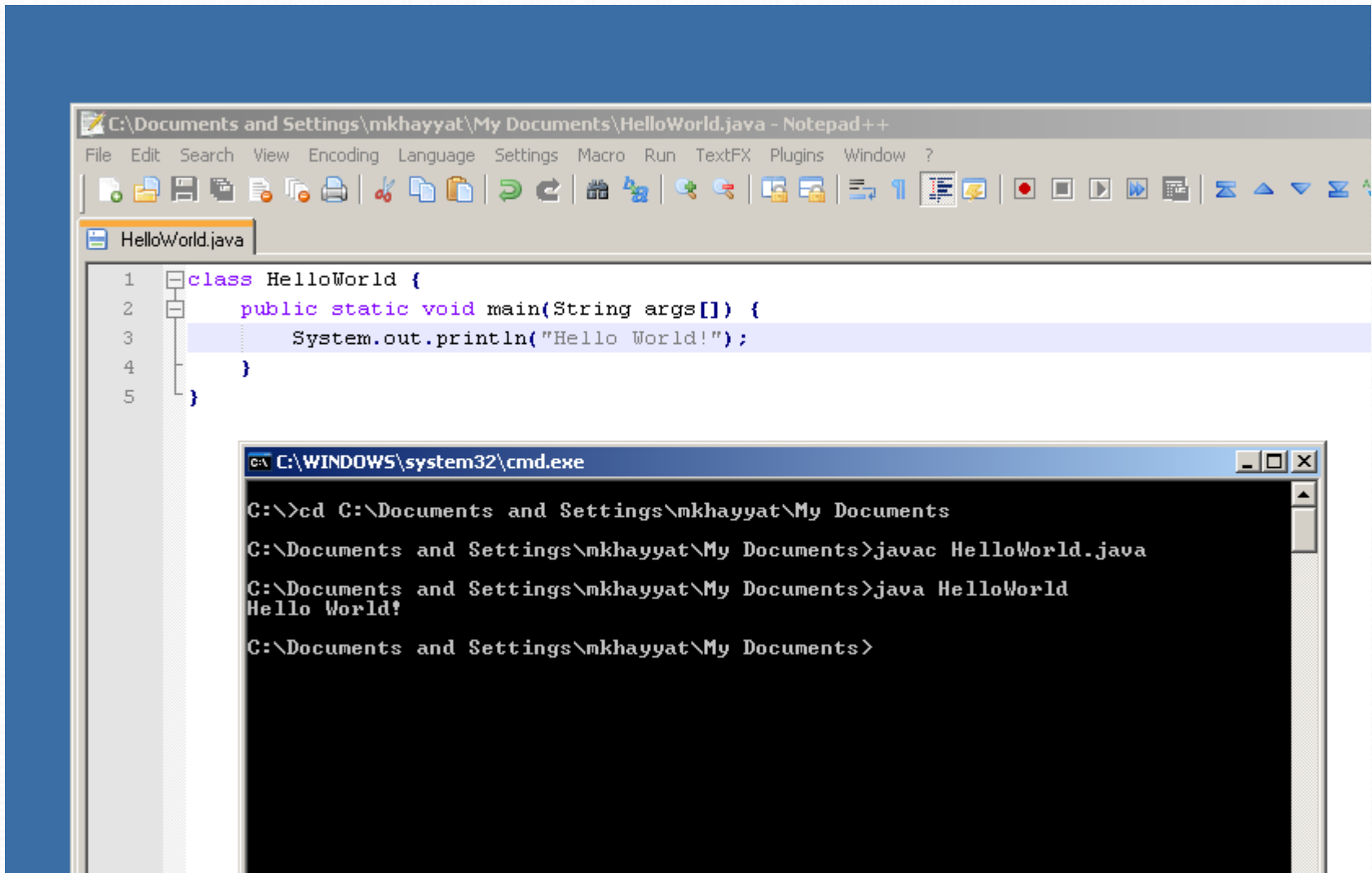- Hello World Application

Note, the java file must be named as `HelloWorld.java`

```
public class HelloWorld
{
    public static void main(String[] args)
    {
        System.out.println("Hello World!");
    }
}
```

Running Java Program Using Command Line

- Write a Java program using any editor (i.e. expL, Notepad) and save it as (FileName.java) file with the same name as the class.

- Go to the directory where you created your program using the command line

- Compile the java file using the following command line:

      > javac FileName.java

- The above command line will compile the program and create *FileName.class* file, if there are no errors in the program

- Run the file using the following command line:

      > java filename

Running Java Program Using Command Line

Download Eclipse

- To download Eclipse visit the web page
  http://www.eclipse.org/downloads/index.php

- You may select any mirror site, e.g. "Main Eclipse Download Site". There are several versions of Eclipse, and it is important you install the correct one. Check that the site has the latest

Download Eclipse

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eclipse-java-helios-SR1-win32-x86_64.zip

Eclipse Installation

- Unlike most modern software products, Eclipse has not have a fancy installation procedure.
- To install it, simply extract the zip file in the directory where your programs are stored, e.g. **C:\Program Files**. This will create a directory named **eclipse**.
- The executable program file is located in this directory and is called "eclipse.exe".
- On Windows systems, it is a good idea to create a shortcut to this executable on your desktop. To do this, right-click on the "eclipse.exe" file and select "Send To → Desktop".

Eclipse Installation

Extract the "eclipse" folder to your preferred destination

Eclipse Installation

Open the folder and run "eclipse.exe"
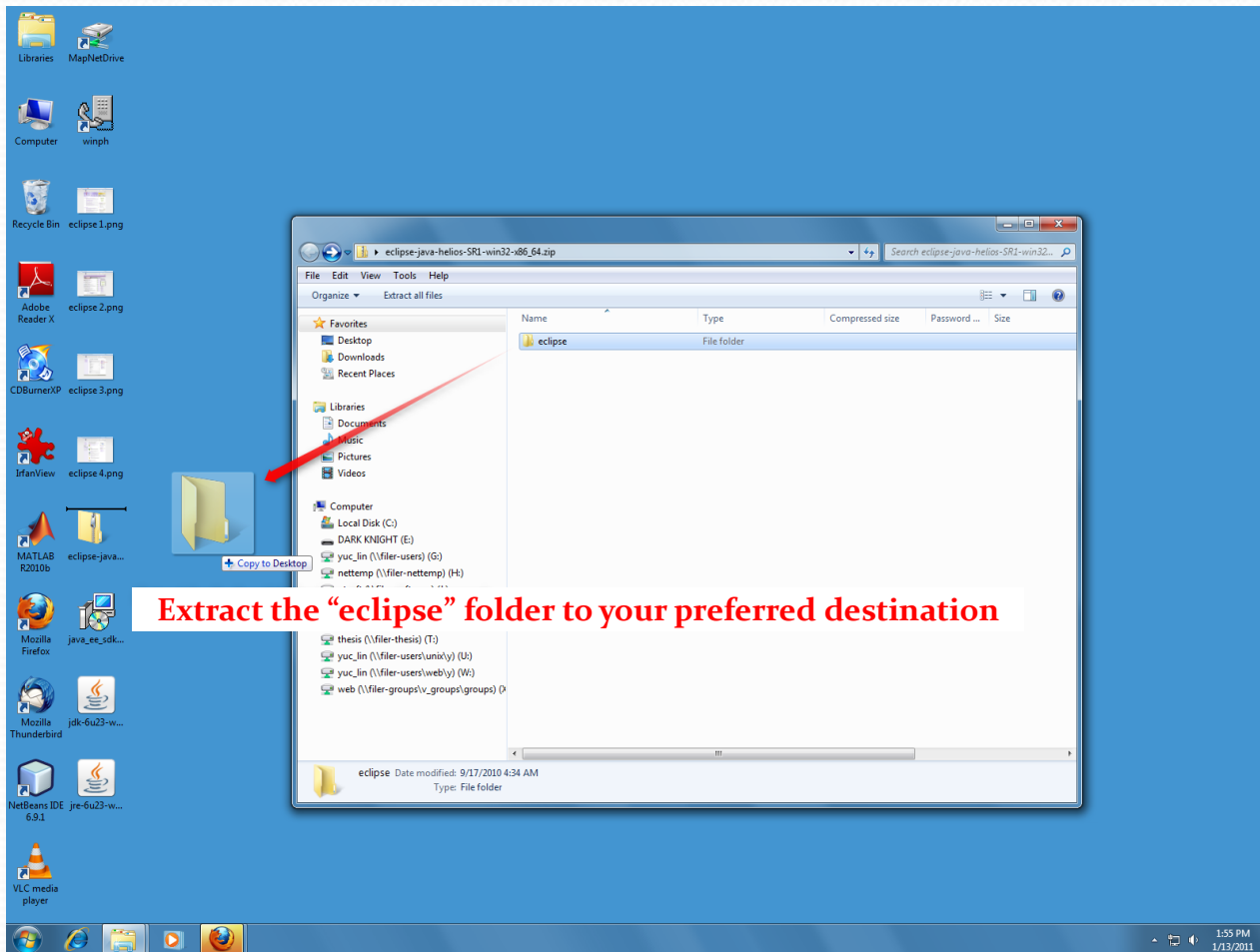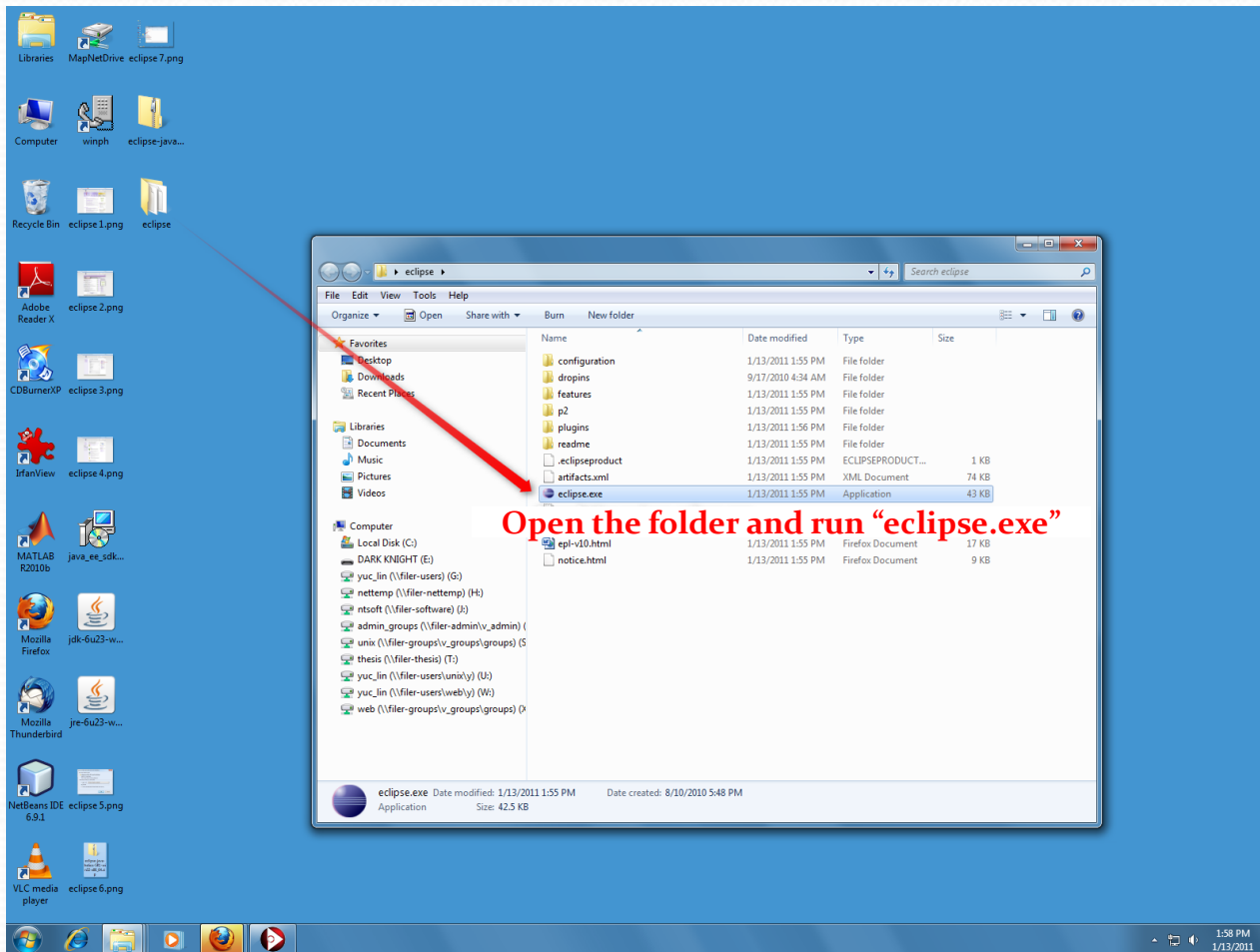
Eclipse Initialization

- Eclipse stores all its files in a directory called it "workspace".
- When Eclipse is running for the first time, it will ask you where you want the workspace to be placed. You can just use the default location (which will be in the directory where eclipse was installed).
- Some people find it more convenient to place the workspace somewhere in their "My Documents" directory, e.g. "My Documents\Eclipse".
- After this, you should see the "Welcome to Eclipse" page. When you see this, you are ready to proceed to the next step.

Eclipse Initialization
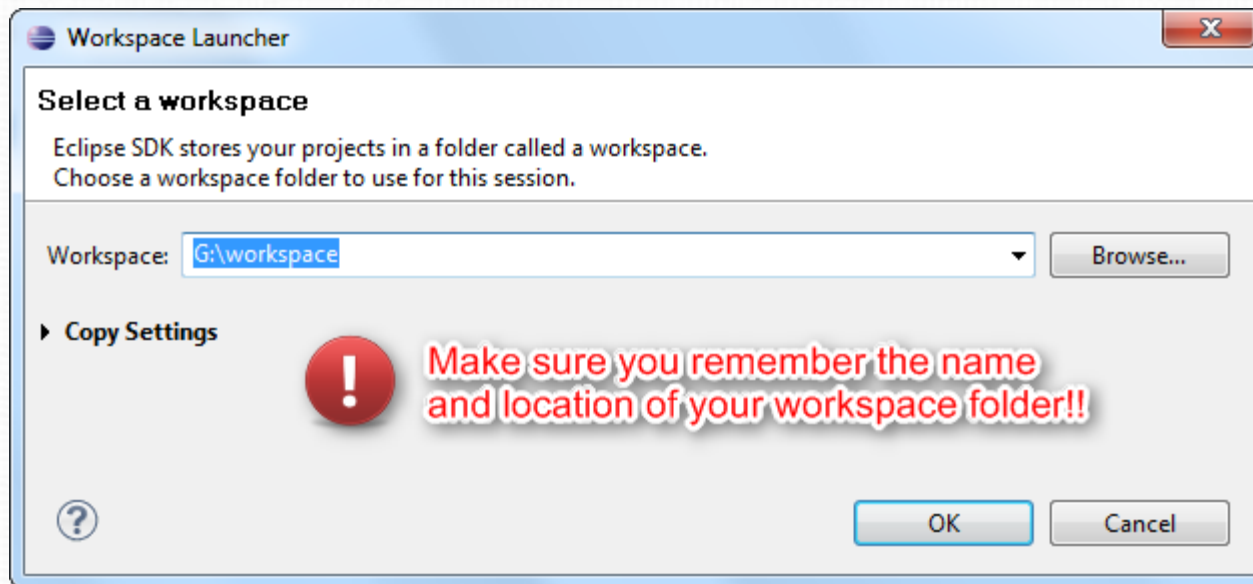
Using Eclipse the first time
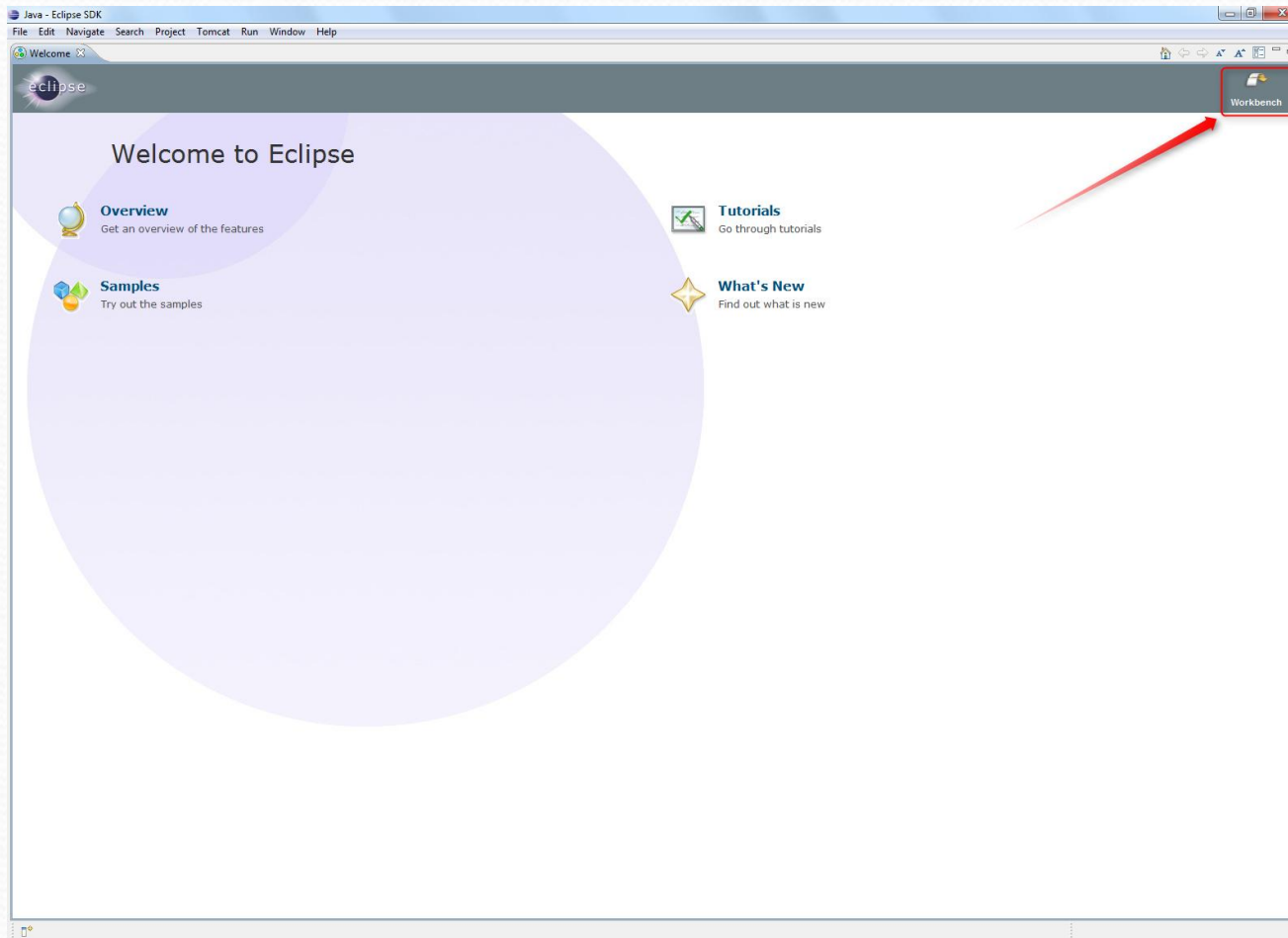
Create a Java Project

Create a Java Project

Create a Java Project

Create a new Java class

Create a new Java class

Run a Java program

Submission of Assignments and Lab Exercices

- Go to the EAS system website @ https://fis.encs.concordia.ca/eas/
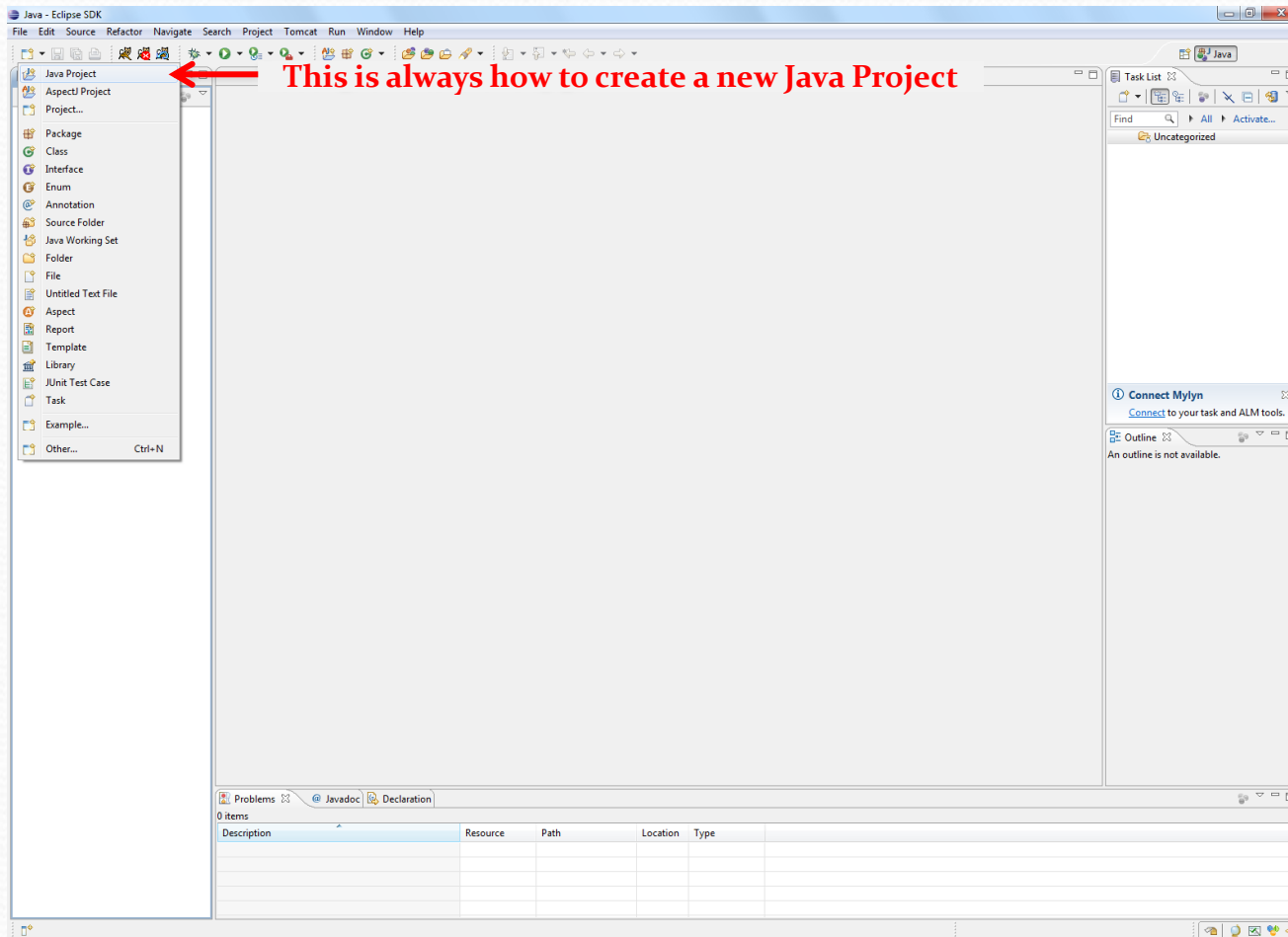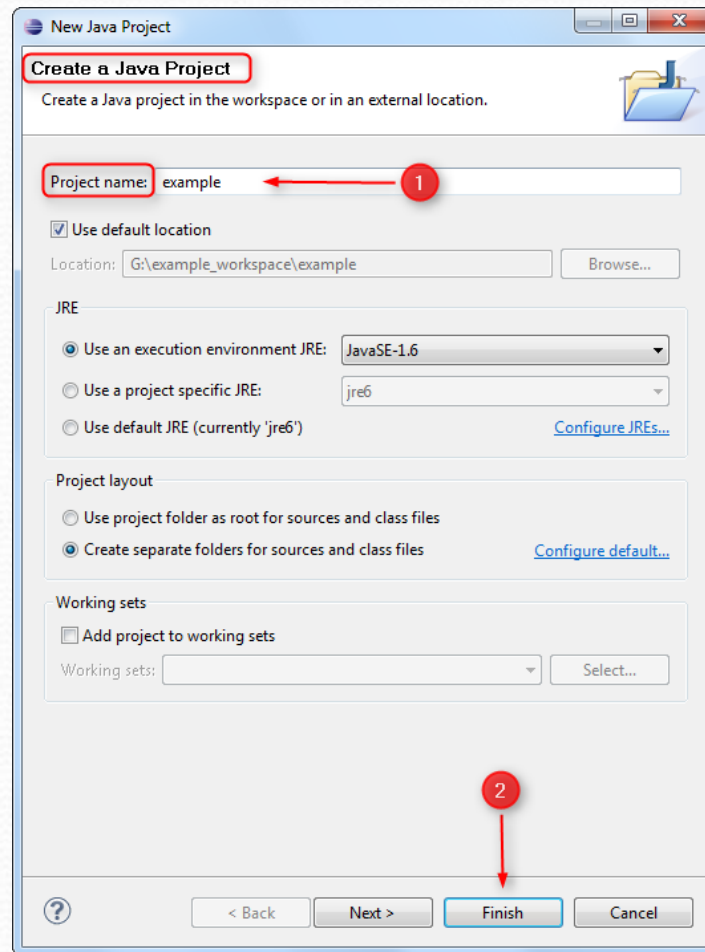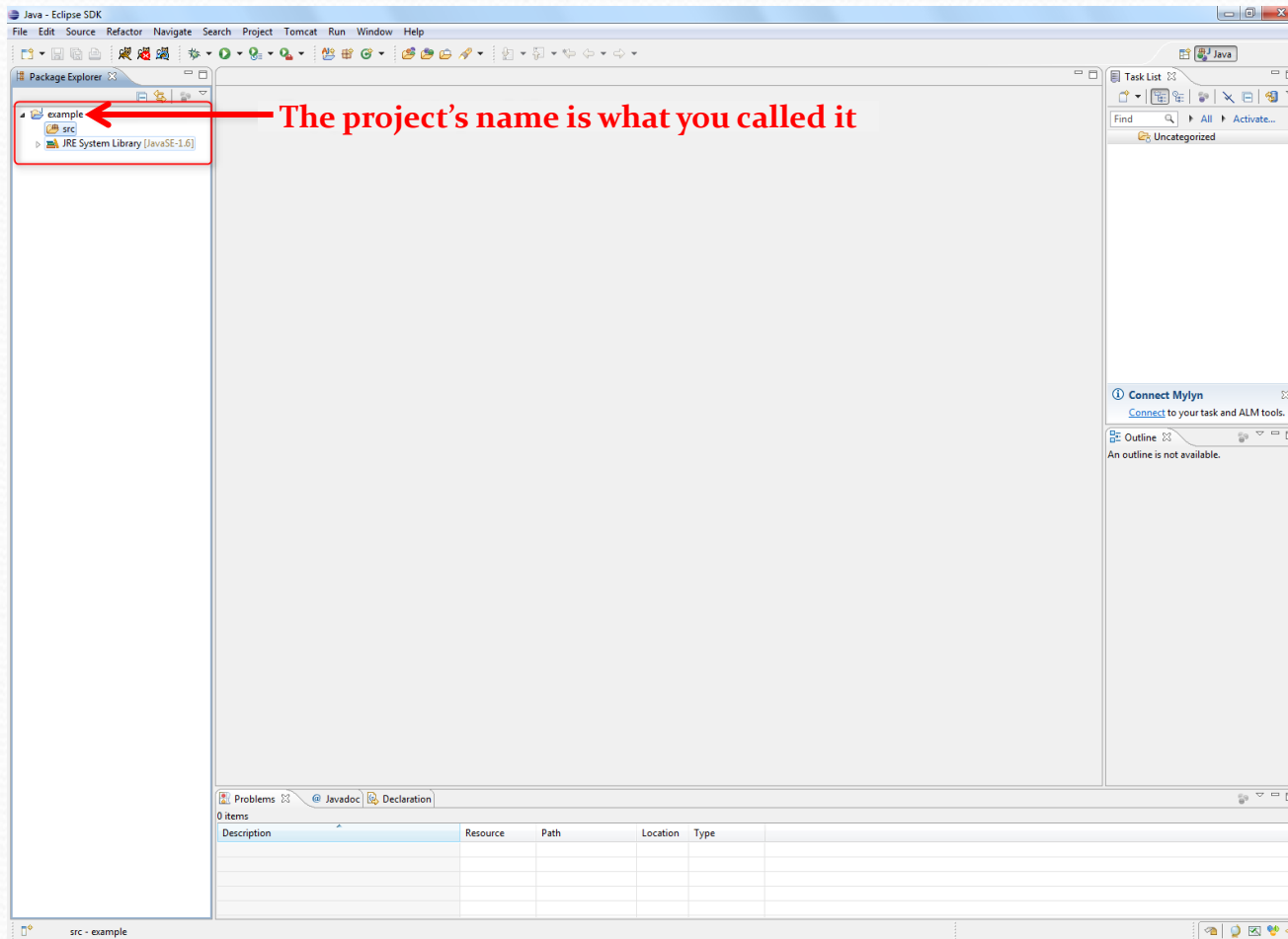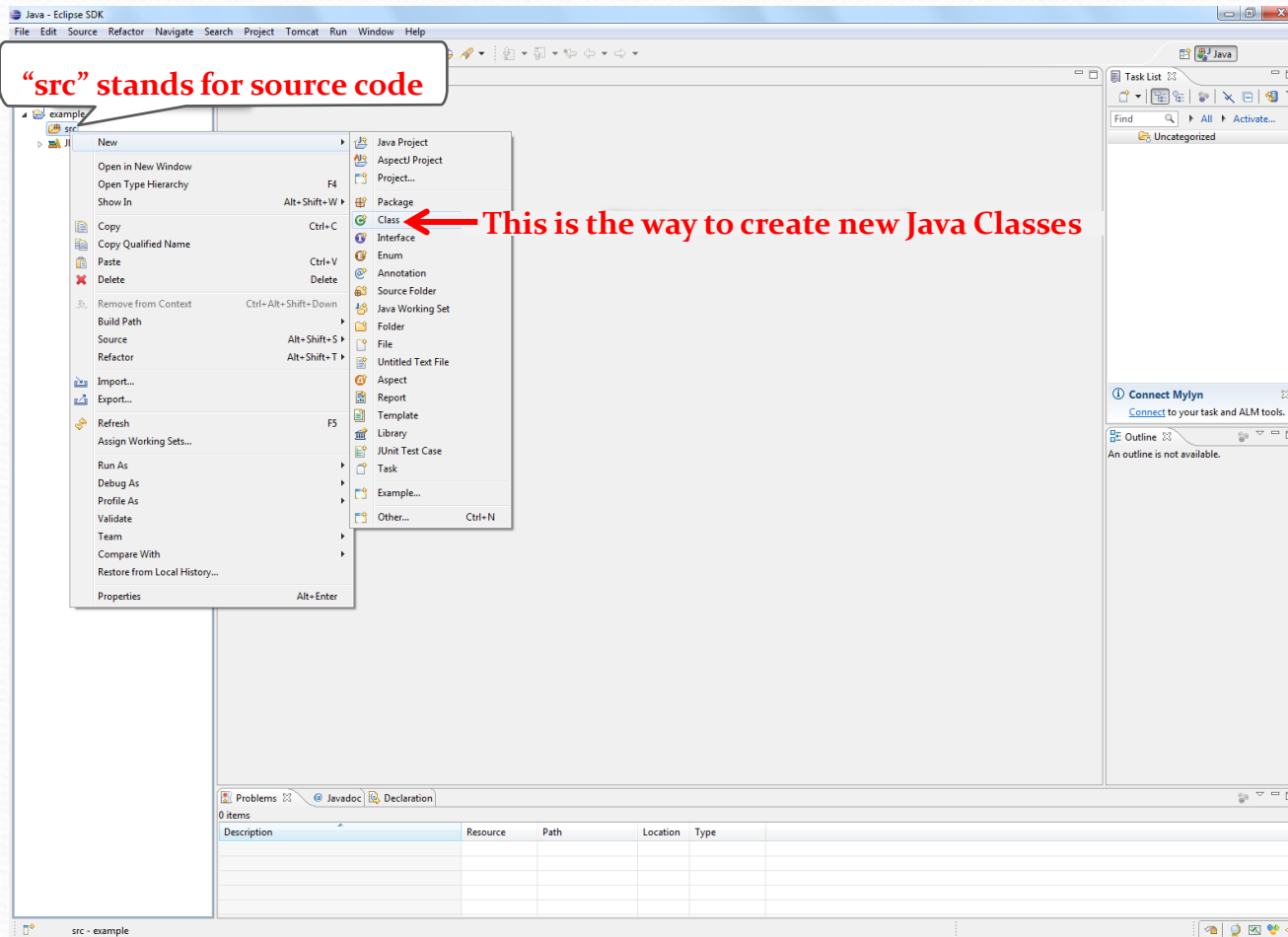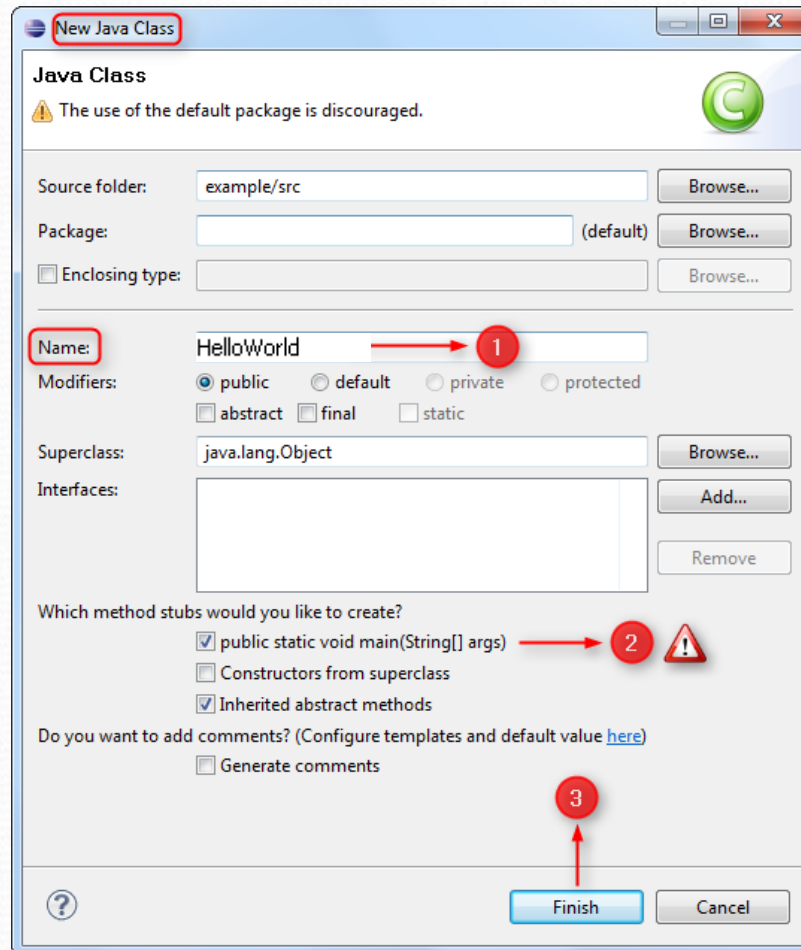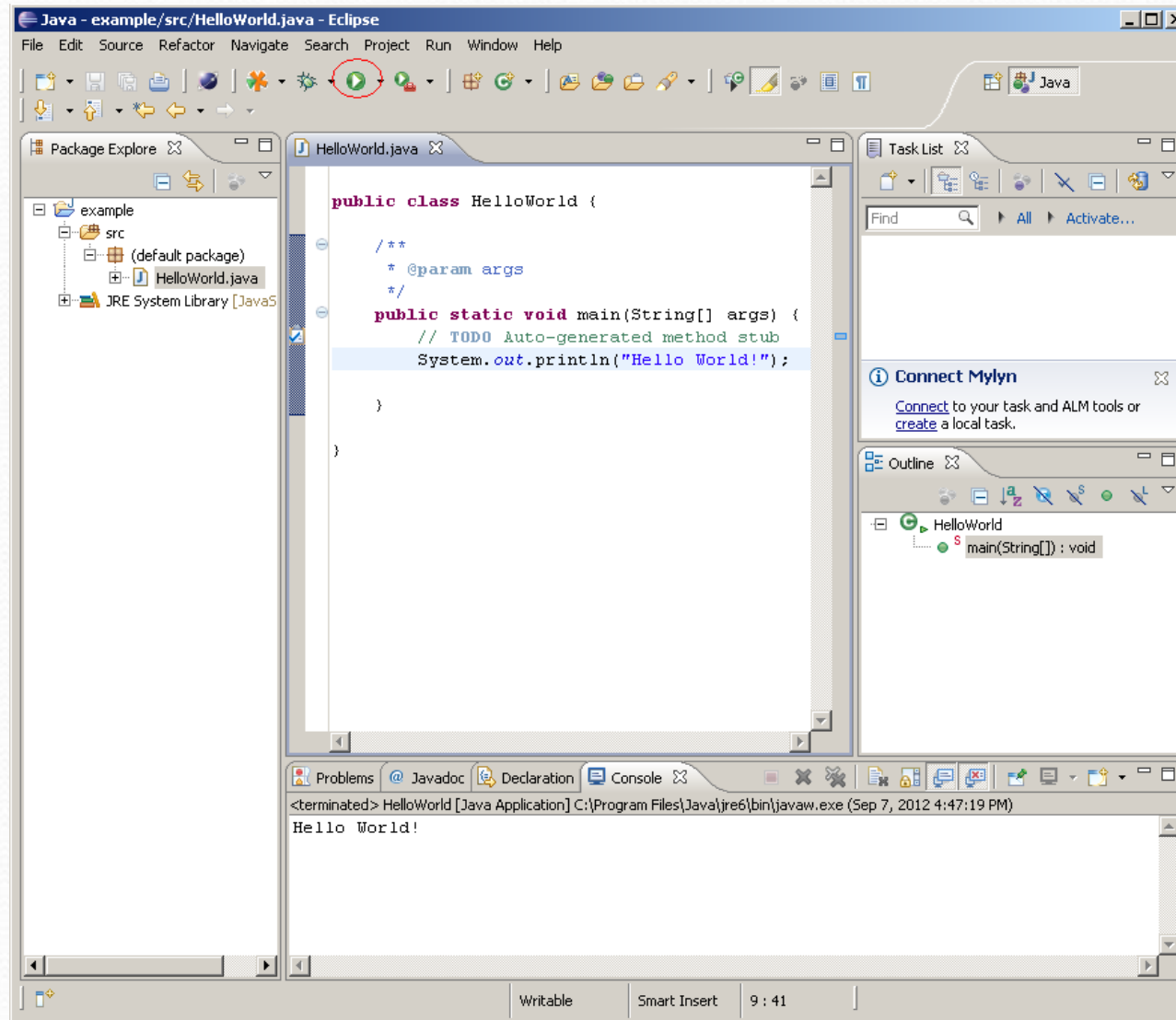- Login with your ENCS username and password
- Click on the "Student" category
- You would expect to see a list of courses you are currently taking
- Scroll down and you will see "Expectations of originality", select "I agree" and continue
- For "Current term course sections", choose COMP248 for this course
- Browse your compressed file (containing your Java files)
- To submit an assignment: select the "submission type" as "programming_assignment"
- To submit a lab exercises, select the "submission type" as "quiz"

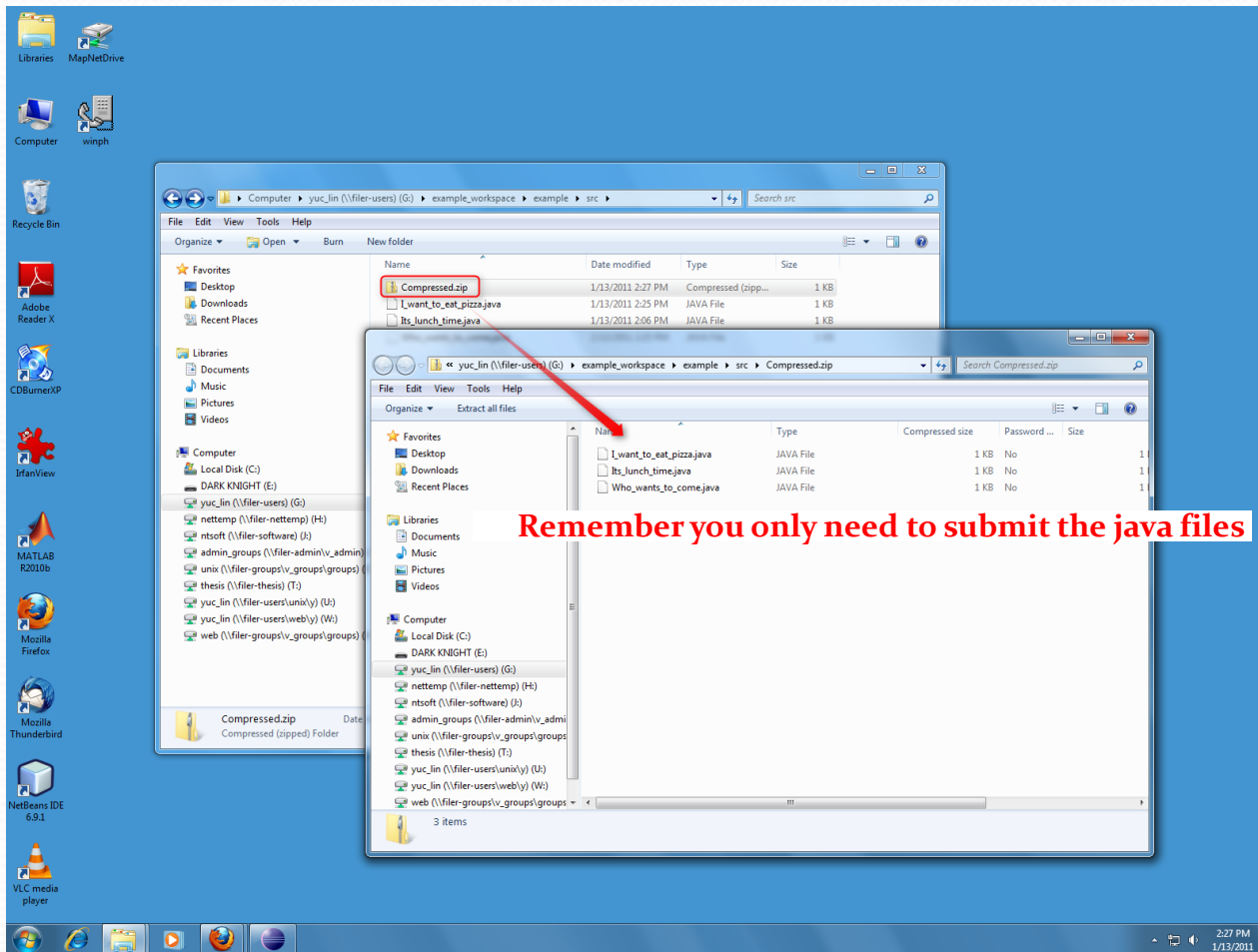# How to compress files
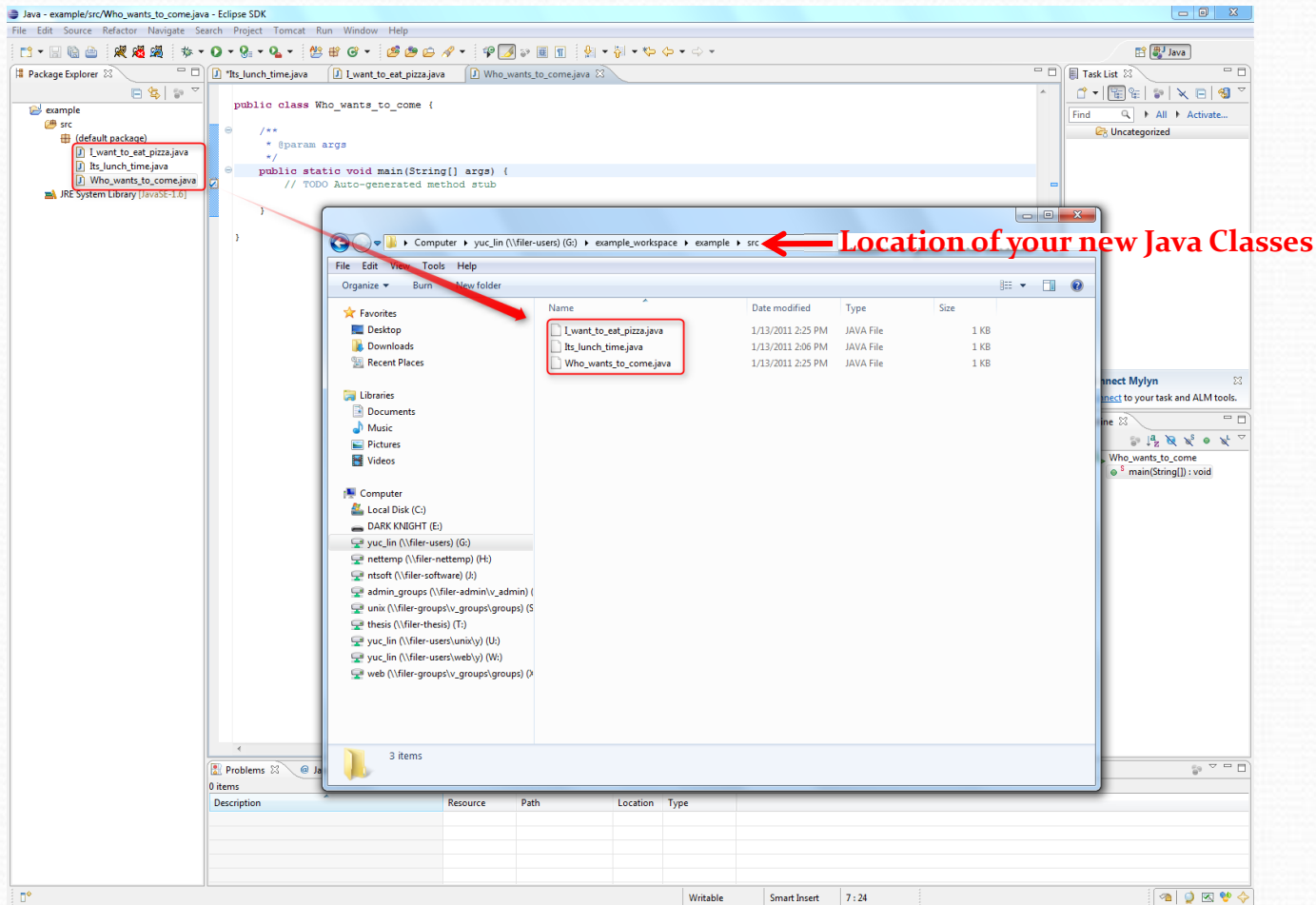
How to compress files
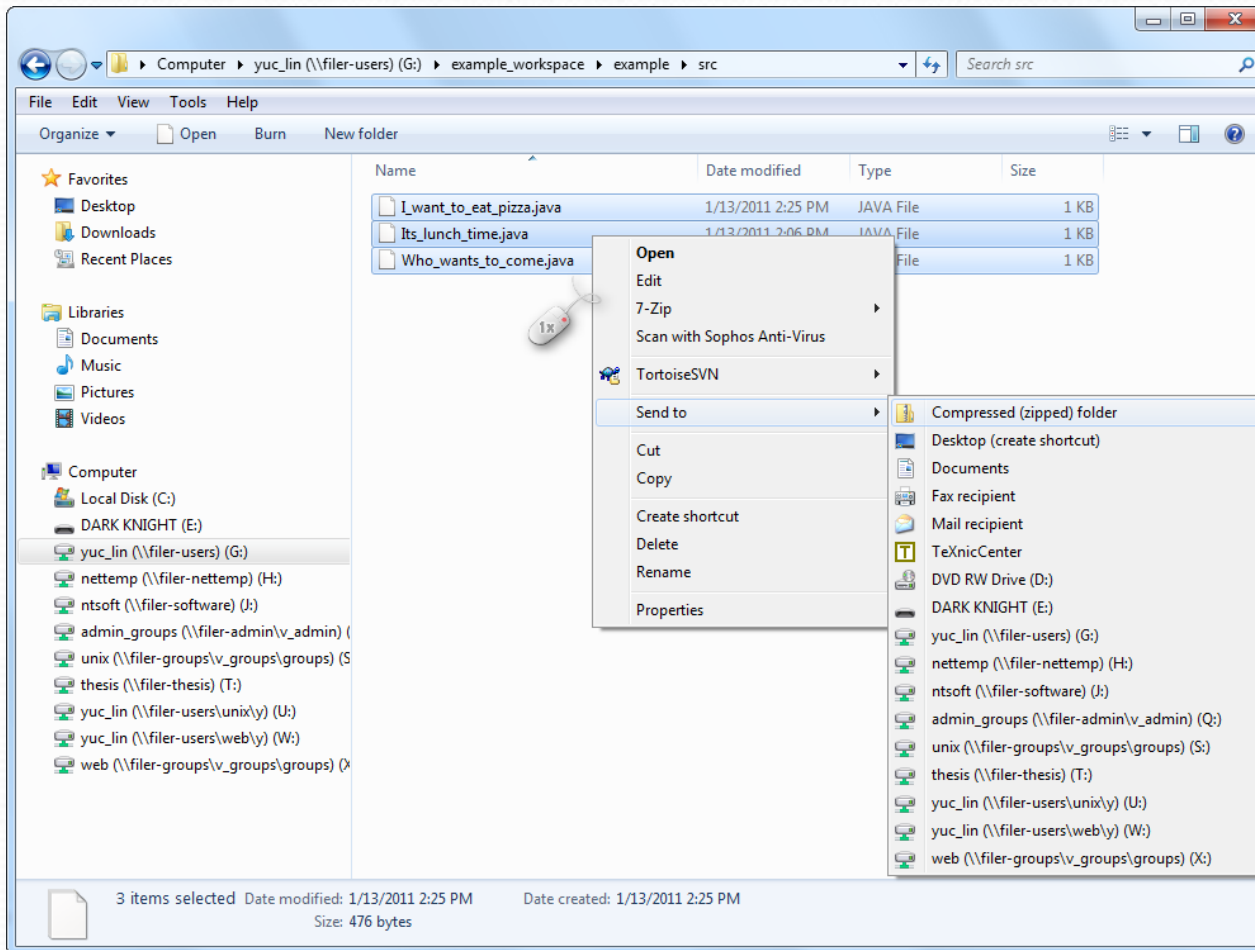
How to compress files

Assignment submission

- Caution --- For "submission number," please be sure to select accordingly
  - assignment #1, please select "1"
  - assignment #2, please select "2"
  - assignment #3, please select "3"
  - etc.