

# CS201 - Assignment 1, Part 1

Due: Friday February 14, at the beginning of class



<https://xkcd.com/1016/>

For the first part of assignment 1, we're just going to make sure that you're all setup with Java and Eclipse (our IDE), that you can run basic Java programs and that you're all set on how to submit assignments.

## 1 Java and Eclipse

To start with, we're going to be doing all of our development in this class using an IDE (Integrated Development Environment). There are many out there, but one of the most commonly used is Eclipse.

For this class, you may either work on your own computer or on one of the linux computers in MBH 632.

*If you're working on your own computer:*

Go to the course web page and follow the instructions for installing Java and Eclipse (steps 1-3).

*If you're working on one of the computers in MBH 632:*

- Go to the lab and login :)
- The easiest way to run most applications is by moving your mouse to the upper left hand corner of the desktop where it says “Activities”.
- Once there, you’ll see some of the basic applications (like Firefox and file access). To start with, click on the filing cabinet. Notice that this has all of your files in a reasonable browsing format. Look around for a few minutes.
- Now let’s start Eclipse. Again, go to “Activities”. The easiest way to run Eclipse (in my opinion) is then just to start typing “Eclipse” in the search box in the middle of the screen. Once you see the Eclipse icon (big purple sphere), click on it to run “Eclipse”.



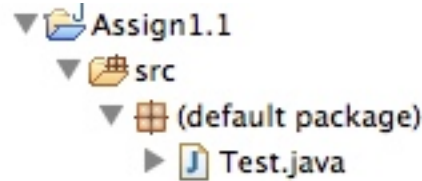
## 2 Creating a Project

On the course web page link for installing Java and Eclipse there are also some instructions for creating a new project.

- Open up Eclipse (if you don’t already have it open).
- It will prompt you about where you want to create the workspace. The default location is fine, or you can also create a subfolder within this default called `cs201`. Just make sure to remember what location you put.
- Now, create a new project called `Assignment1`. You do NOT need to include the Bailey library for this.
- You should now see a project called `Assignment1` in the workspace for Eclipse on the left hand side. Click on that project.
- Now, let’s create our first `.java` file. Select **File** → **New** → **Class**.
- This will bring up a dialog box. In the “Name” field type “Test” and then click “Finish”. You should see a mostly empty file in the editor screen (specifically, it should start with `public class Test` followed by an opening and closing brace).

You’ve now created your first Java project and your first class (more on classes on Friday).

If you look in the “Package Explorer” on the left side of Eclipse, you should now see your new project and the `Test.java` file:



### 3 Running Eclipse

Let’s now put something more interesting in our test file. If the `Test.java` file isn’t open already, double-click on it in the package explorer on the left. First, *delete all of the text that is currently in the Test class* (that is the file you just created).

Then, go to:

<http://www.cs.middlebury.edu/~dkauchak/classes/cs201/assignments/assign1/part1/Test.java>

Copy all of the text in this `.java` file and paste it into your newly created `Test` class file. If all went well, you shouldn’t have any red squiggly lines (i.e. syntax errors). If you do, delete all the text and try copying and pasting again.

Once you’ve done this, you should now be able to run this small program to see what it does. Click on the green “run” arrow:



At the bottom of the screen is the input/output console (among other things). You should see printed there the result of running the program.

### 4 Submission

Create a new text file called `assign1.1.txt`. In this file write your name along with the answer you got from running the test program.

If you’re working in the lab `gedit` is a fairly straightforward text editor you can use. Find it just like you found Eclipse.

Save this file and then submit it using the “digital submission” link on the course web page. For the assignment number put “1.1”.



## 5 Extra Credit

That's all that's required for this first part of assignment 1. If you'd like a bit more of a challenge (and a *small* amount of extra credit) explain to me **why** the program output what it did.

I haven't taught you about everything in this file but you should be able to figure most of it out. Here are a few helpers:

- The program begins in the function called `main`.
- You can ignore the `public static` in front of all of the functions for now. We'll talk about that soon.
- You can think of 'C' as being the String containing the single letter C.

If you decide to do the extra credit, put your description in the `.txt` file that you submit in addition to your name and what the program outputs.