

6.005 — Software Construction on MIT OpenCourseWare (<https://ocw.mit.edu/ans7870/6/6.005/s16/>) |  
OCW 6.005 Homepage (<https://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-005-software-construction-spring-2016/>)  
Spring 2016

Learning Java

Materials

# Learning Java

**6.005 requires you to get up to speed quickly with the basics of Java.** If you are not familiar with Java:

- review the materials below
- review **Reading 2** ([../classes/02-basic-java/](#))

## Materials

The lecture slides and short programming assignments below are from IAP course 6.092 in 2010 (<https://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-092-introduction-to-programming-in-java-january-iap-2010/index.htm>) . They were authored by Evan Jones, Adam Marcus, and Eugene Wu.

You can also look at **materials from 6.S092 in 2015**

([//stellar.mit.edu/S/course/6/ia15/6.S092/materials.html](http://stellar.mit.edu/S/course/6/ia15/6.S092/materials.html)) or the most recent **materials from 6.178 in 2016** (<https://learning-modules.mit.edu/materials/index.html?uuid=/course/6/ia16/6.178>) .

## Slides

- Lecture 1 - Types, Variables, Operators ([https://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-092-introduction-to-programming-in-java-january-iap-2010/lecture-notes/MIT6\\_092IAP10\\_lec01.pdf](https://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-092-introduction-to-programming-in-java-january-iap-2010/lecture-notes/MIT6_092IAP10_lec01.pdf))
- Lecture 2 - More Types, Methods, Conditionals ([https://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-092-introduction-to-programming-in-java-january-iap-2010/lecture-notes/MIT6\\_092IAP10\\_lec02.pdf](https://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-092-introduction-to-programming-in-java-january-iap-2010/lecture-notes/MIT6_092IAP10_lec02.pdf))
- Lecture 3 - Loops, Arrays ([https://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-092-introduction-to-programming-in-java-january-iap-2010/lecture-notes/MIT6\\_092IAP10\\_lec03.pdf](https://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-092-introduction-to-programming-in-java-january-iap-2010/lecture-notes/MIT6_092IAP10_lec03.pdf))
- Lecture 4 - Classes and Objects ([https://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-092-introduction-to-programming-in-java-january-iap-2010/lecture-notes/MIT6\\_092IAP10\\_lec04.pdf](https://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-092-introduction-to-programming-in-java-january-iap-2010/lecture-notes/MIT6_092IAP10_lec04.pdf))

## Short Programming Assignments

You can use these assignments (<https://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-092-introduction-to-programming-in-java-january-iap-2010/assignments/>) to practice Java before diving into PS0 ([../psets/ps0/](#)) , Git ([//git-scm.com](http://git-scm.com)) , and JUnit ([//junit.org](http://junit.org)) .

**The assignments below are not required for 6.005.** You will not turn them in.

To work on the assignments, create a new Eclipse Java project ( *File* → *New* → *Java Project* , name it `tutorial` , click *Finish* ).

Then create a new class file ( *File* → *New* → *Class* , enter the CamelCase name, click *Finish* ).

Then copy-and-paste in the provided starting code.

To run a class with a `main` method, right-click and choose *Run As* → *Java Application* .

- Assignment 1 - GravityCalculator ([https://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-092-introduction-to-programming-in-java-january-iap-2010/assignments/MIT6\\_092IAP10\\_assn01.pdf](https://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-092-introduction-to-programming-in-java-january-iap-2010/assignments/MIT6_092IAP10_assn01.pdf))
- Assignment 2 - FooCorporation ([https://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-092-introduction-to-programming-in-java-january-iap-2010/assignments/MIT6\\_092IAP10\\_assn02.pdf](https://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-092-introduction-to-programming-in-java-january-iap-2010/assignments/MIT6_092IAP10_assn02.pdf))
- Assignment 3 - Marathon ([https://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-092-introduction-to-programming-in-java-january-iap-2010/assignments/MIT6\\_092IAP10\\_assn03.pdf](https://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-092-introduction-to-programming-in-java-january-iap-2010/assignments/MIT6_092IAP10_assn03.pdf))

---

## Have fun in 6.005!

MIT EECS