

# AP Computer Science A

## Summer Prep

Hello and welcome to the inaugural class on AP CS here at West Seattle HS. There is no mandatory summer preparation for this class. There is no programming background required for the class. However, this is an AP class which means that we will be covering a lot of material. We will actually be following the University of Washington curriculum for their introductory Computer Science class (CSE 142). So, if you want to do a little work to get a head start, here are a few options for you.

[Lightbot](http://lightbot.com/hocflash.html) (<http://lightbot.com/hocflash.html>) – This is a fun set of exercises that are not language specific but which exercise thinking programmatically and introduce how to use functions and iteration (looping) to simplify programs. I enjoyed doing these just for the fun of it.

[Java Tutorial Videos](https://www.thenewboston.com/videos.php?cat=31) (<https://www.thenewboston.com/videos.php?cat=31>) – The programming language that we will be using is Java. The videos at this site take you through a step by step introduction to the language if you would like to get a taste of it. Part of programming is learning the Integrated Development Environment (IDE) that you use to write, compile, and test your programs. Unfortunately, these videos use the Eclipse IDE and we will be using JGrasp in the class. If you want to, you can go ahead and use Eclipse and switch over to JGrasp in the fall. JGrasp is simpler so it should be an easy move. Alternatively, you could go through the jGrasp ‘Getting Started’ tutorial below and then selectively view the videos for the Java specific content.

[JGrasp Tutorials](http://www.jgrasp.org/) (<http://www.jgrasp.org/>) – As I mentioned above, jGrasp is the environment that we will be using to build and debug our programs. On their site, there are a series of tutorials on the lower left of the page that point to incremental tutorials on how to install and use JGrasp. Don’t go past Getting Started (2.0) and stop when you get to Projects. That will be plenty to get you through most of the course and there are several things in jGrasp that we will not use.

[Installing Java:](#) You will also have to install the latest Java development kit (JDK) (<http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html>.)

[Coding.bat](http://codingbat.com/java) (<http://codingbat.com/java>) and [PracticeIt](http://practiceit.cs.washington.edu/index.jsp) (<http://practiceit.cs.washington.edu/index.jsp>) – These are a couple of fun sites if you already know some Java but want to brush up. Neither of these sites requires that you install an IDE. They give you a programming problem and some space to enter a write a solution. They then test your solution and let you know if it works correctly. You can also see their solution. We will be using PracticeIt in class so when you create an account, enter your school as ‘West Seattle High School’ to get credit for any work you do.

If you get stuck with any of this, please send me an email at [rcmiller@seattleschools.org](mailto:rcmiller@seattleschools.org) anytime. I will be away in mid-July and early August but outside of those periods, I will get back to you as quickly as I can.

I’m looking forward to an exciting inaugural class next year. Have a great summer.

Mr. Colin Miller