

AP Computer Science A

Summer Assignment – DUE August 19th

Hello and welcome to AP CSA! In the coming year, you will be learning to program in Java, and will develop your problem solving and critical thinking skills. This is a fun and challenging course. To prepare for the AP CSA, your summer assignment requires you to read, take notes, and work through some exercises. **Please do not try to complete it all in the final week.** The material takes time to process and grasp at a level necessary for success in AP CSA. Remember, AP CSA is a college level course. Taking a college level course in high school is difficult, requires dedication, and is a great investment in your education so prepare yourself and arrive ready to learn.

Assignment:

You will read chapters 1 and 2 of a companion book titled Think Java: How to Think Like a Computer Scientist by Downey and Mayfield. The book introduces computer science and the art and science of programming. The book can be downloaded as a pdf here:

<http://greenteapress.com/thinkjava6/thinkjava.pdf>

As you read each chapter, you should take detailed notes. In addition, you should be executing any example programs you find in the text (the first can be found on page 5). A tool for compiling and executing your Java code can be found below.

At the end of each chapter there is a set of exercises that you must work through. Your answers and any code you write should be in a single text file that you will submit on Canvas.

Tools:

You will need to compile and execute programs in order to work through the examples and the exercises at the end of each chapter. JDoodle is a simple to use online Java IDE that compiles and executes all in one. It can be found at <https://www.jdoodle.com/online-java-compiler>

Submission Instructions (due Monday August 19th)

Your answers to the exercises (including any code you wrote) should be gathered in a single text file that you will submit on Canvas by the due date.

Summer Bridge Sessions

In order to prepare you for AP CSA, Manasquan High School is offering a summer bridge course. The course will meet for 18 sessions, you will need to attend at least 10. Sessions are Tues, Wed, and Thurs 8:30am to 10:30am from July 9th until August 15th. The summer course will be broken up into 4 modules: 1) Computers and the Internet, 2) Intro to Programming, 3) Event Driven Programming, and 4) Data Structures. You must complete all modules.