

Students Entering AP Computer Science after taking the Intro Course

Preparation for AP CS

You will need to install Java and BlueJ on your computer before the school year starts. Some of the summer assignment must be done within the BlueJ IDE.

JAVA & BLUEJ

Go to bluej.org and select the appropriate BlueJ and JDK for your operating system: Windows, Mac, Etc. If you run into any issues with the install, search Google for solutions to your issues. Post Comments on Google Classroom for more assistance (code: **jy9lho9**).

Three Part APCS Programming Summer Assignment**Part 1 Greenfoot (50 pts)**

Download GreenFoot at <http://www.greenfoot.org/download> Review the content in the 6 tutorials on <http://www.greenfoot.org/doc> Students who completed the tutorials during intro should review the material before creating a *new* program this summer.

Create a program using the content reviewed in the above tutorials. Make sure to include

- **at least 2 different Actor Subclasses**
- **have one actor controlled by the keyboard**
- **Utilize the random number generator**
- **Create some sort of action on collision**
- **Create some counter that will interact with the collision events within the World**

Part 2 BlueJ (20 pts) – Required for all students:

Review the New Boston website tutorials 2-6 for some basics on Java.

<https://thenewboston.com/videos.php?cat=31>

Create the following two programs:

- a) Create a class named “HelloWorld” that when run, it will print out the string “Hello World” to the console.
- b) Create a class named “facePrint” that when run, it will print out a face to the console similar to the one below. Be creative and at least 5 lines should be printed.

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APCS Vocabulary

You should be familiar with the following terminology. Please define the following as it pertains to Computer Science. Submit these definitions on classroom by the first day of class. (10 points).

Java _____

Object _____

Program _____

Algorithm _____

Method _____

Class _____

Variable _____

Boolean _____

String _____

Parameter _____