AP Computer Science A – Summer Work

Welcome to AP Computer Science A. This course does not require any prior programming knowledge, but does require that you come with strong logical skills, strong arithmetic skills, and the ability to persevere through failure. You have all been recommended or strongly endorsed by your previous teachers on those abilities mentioned. I am very much looking forward to working with you to hone those skills to solve real world problems, in a creative and algorithmic approach.

Although prior experience, especially that of our Programming 1 and 2 courses, is encouraged, it is not required. Those of you who have taken Programming 1 and 2, you will notice our approach to solving problems will not differ by much and you will pick on the language of java quickly. For those of you who have not had the opportunity, will start from the beginning and progress at a pace that is rigorous. The more you are able to practice outside of school and supplement the in class activities the easier this becomes. If you would like to get a head start on the laguage I would invite you to particpate in a couple of online tutorials that are free to register for.

SoloLearn: Java Tutorials - https://www.sololearn.com/
SoloLearn is a simple online tutorial site that will allow you to learn quiet a few different languages. The topics included in the tutorials are basic and will help guide you through syntax and simple logic. Create a free account and it will track your progress. At the very least attempt to get through the basic skills java tutorials, but you are more than welcome to advance through the course as much as you want. Every topic covered in the tutorial will also be covered in greater detail in class.

LightBot: Introduction to Structured Programming - https://lightbot.com/flash.html
LightBot is more like a game that introduces you to structured programming techniques. It's quick to learn but difficult to master. Give it a try, you'll have fun doing it and can easily spend an hour at a time doing the puzzles.

Take some time this summer to introduce yourself to programming. One of my favorite things is to simply watch YouTube videos of new and different things I can implement in class. One of my favorite channels is "This is CS50"[i]. However I have found that the most successful students are those who immerse themselves in coding and find the joy in it. The more you practice coding on your own, the more time you'll have in class to focus on the problem solving. Which is what this course is really all about.

Have fun with it and email me with any questions you may have.

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[i] CS50 is Harvard University's introduction to the intellectual enterprises of computer science and the art of programming.