

# White Station High School-Mr. Harris-Room M110

## AP Computer Science A- Summer Assignment, 2022

The purpose of the AP Computer Science (AP CS A) summer assignment is to prepare students for the challenges in AP CS A and to ensure the student is aware of the content and commitment level involved in this college level course. Don't worry if you have never programmed. AP CS A will teach you how to code in Java. Please read and complete all steps in this document. The assignment is due by the first week of class.

1. Read Chapter 1: "The Way of the Program" in the free online textbook, "Think Java: How to Think Like a Computer Scientist" by Allen B. Downey and Chris Mayfield. The textbook is located at [thinkjava.org](http://thinkjava.org)-2nd Edition, Version 7.1.0. You can download the textbook as a pdf or read it online.
2. Complete the Summer Assignment Questions (next page). The assignment is due by the first week of class.

Over the summer, I usually check emails weekly. If you need anything or have a concern, please email me at [harristm@scsk12.org](mailto:harristm@scsk12.org).

Have a great summer and I am looking forward to seeing you in August.

## AP Computer Science Summer Assignment Questions

Name: \_\_\_\_\_

Date: \_\_\_\_\_

After reading Chapter 1: “The Way of the Program” in the online textbook, “Think Java: How to Think Like a Computer Scientist”, answer the following questions.

1. How does thinking like a computer scientist compare to thinking like a mathematician, an engineer, and a scientist?
2. What is the single most important skill for a computer scientist? Explain.
3. Java is an example of a high-level language. What is the difference between a high-level language and a low-level language?
4. List two advantages of programming in a high-level language. List one disadvantage.
5. In Computer Science/Programming, what does portable mean?
6. What is an interpreter?
7. What is a compiler?

