

WSHS-Mr. Thomas Mark Harris-harrism@scsk12.org  
AP Computer Science Principles Summer Assignment

Welcome to AP CSP! I hope you are enjoying your summer break and are looking forward to exploring the vast world of Computer Science with you in this class. This summer assignment is designed to give you an idea of what this class is all about. Record your answers to this 2-part assignment in the form below. Save your work and be ready to share during the first week of school in August. THANKS!! Mr. Harris

Part 1: Think about a place in your life where you could design/program a device or app to solve a problem you are facing. In a short summary describe the problem and what you are thinking of creating to solve it (algorithm).

Problem:

Solution:

Part 2: AP CSP is based on 5 Big Ideas:

1. **Creative Development:** how important collaboration is in developing programs and how to use an iterative process in your work.
2. **Data:** how computers handle data and how data can be used to produce new information and solve problems.
3. **Algorithms and Programming:** use algorithms and abstractions to create programs that solve problems or to express your own creativity.
4. **Computer Systems and Networks:** how computer systems and networks work and how using multiple computers to divide tasks can speed up processes.
5. **Impact of Computing:** examine the effects computing has had on societies, economies, and cultures and consider the legal and ethical responsibilities of programmers.

You have already addressed the 3rd “Big Idea” in the first part of this assignment. Pick 2 of the other “Big Ideas” listed above and explain how your device or app involves each idea.

Big Idea:

How does your solution involve this idea?

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