

# Independent Study Computer Science 2019-2020

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## Pacing Guide MP1

My ultimate goal this year in independent study is to improve my abilities of discipline and my ability to study to the point where I can successfully get a 5 on the AP Computer Science A Exam in May. To do this I will be using a variety of resources, but the first of these will be a run through of a textbook found at <https://runestone.academy/runestone/books/published/apcsareview/index.html> . After this I will likely do lots of Java based projects and practice tests during the second marking period, but this is yet to come. Also during this work I plan to continue my work with the programming club for competitions and my personal work in electrical engineering and machine learning on my blog.

- Week 1 - Primitive Types (1) and Using Objects (2)
  - Chapters 1 through 3 of the textbook and all associated problems and work
- Week 2 - Boolean Expressions and If Statements (3)
  - Chapters 4 and 5, all associated problems and work
- Week 3 - Iteration (4)
  - Chapter 6 and the magpie chatbot work
- Week 4 - Writing Classes (5)
  - Chapter 7 and all associated work
- Week 5 - Array (6)
  - Chapters 8 and 9 and all associated work
- Week 6 - ArrayList (7)
  - Chapter 10 and all associated work
- Week 7 - 2D Array (8)
  - Chapter 11 and all associated work
- Week 8 - Inheritance (9)
  - Chapter 12 and all associated work
- Week 9 - Recursion (10)
  - Chapter 13 and all associated work

After completing these 9 weeks I'll have covered the 10 main topics of the AP CSA Exam and course found on page 22 here <https://apcentral.collegeboard.org/pdf/ap-computer-science-a-course-and-exam-description.pdf?course=ap-computer-science-a> . I will be submitting all notes and work done for each chapter of the course onto my GitHub account and to schoology for you.