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APCS2 pd1
HW04 -- So Easy, Even a Caveturtle Can Do It
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Introduction
In class, I had a hard time understanding what was needed to be done in order to sort a full deck of cards. After actually using the whiteboard in the dojo to sketch a process of sorting an unsorted array of ints, and confirming my algorithm with Sensei Jake, I was able to not only understand how to sort the deck of cards, but I was also able to explain the process to others, using an 8-element deck of cards made of KtSs.

Algorithm
1. Given an unsorted deck of cards, divide the deck in half repeatedly, **creating new, smaller decks (arrays),** until the result is decks each containing only one card, or **only one element**. Having only one card in each deck ensures that each resulting deck is **sorted**.
2. Next, simple comparisons will be made to combine the lists together: **merging** them by **comparing** the first card of each sub-deck, **or the first element of each array**, by means of finding the **smallest value** and suit of the two cards. The card of the two first cards with the smallest value and suit will be placed in a new, sorted deck.
3. Repeat this process with every deck until there is only one resulting deck. This is the final, sorted deck of cards.