Ryan Siu APCS2 pd5 HW05 -- Splittin' n Mergin' 2017-02-08

The deck sorting process can be separated into two different stages.

A. Splitting

- 1. Split the deck in half and hand the two halves to two different people.
- 2. If you have more than one card, go to step 1.

B. Receiving

- 1. If you have one card, give your card back to the person that gave it to you.
- 2. Otherwise, if you have more than one card, combine the two sorted decks that you have by (assume the lowest value card is on the top, face-up):
 - i. Compare the top card in each deck and put the lower value card face-down on the table in a pile.
 - ii. Repeat (i) until you run out of cards in one deck.
 - iii. Put the remaining cards face-down on the pile.
 - iv. Flip your sorted pile face-up.
- 3. Give the sorted face-up deck back to the person who gave you the cards.