Q1: Fill in the up pass and down pass for parallel prefix count-of-items-greater-than-10.

Compare and contrast these three problems and describe a parallel algorithm for each one.

Q1: Return an int total count of integers in the input array greater than 10.

Q2: Return an int[] of prefix counts of integers in the input array greater than 10.

Q3: Return an int[] of only integers in the input array greater than 10 in the input order.
Q1: Describe a parallel algorithm for expand, which takes an int[] and returns an int[] where each item a[x] appears a[x] times in the input order.

Q: Say we pick the median from the smaller sorted array and run binary search to find the split point in the larger sorted array. Give a recurrence for the worst-case span of parallel merge.