

## Assignment2

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2022 winter

1. Use divide-and-conquer technique to calculate sum of an integer array.  
Use two different ways to define subproblems. For each way:
  - a. write the pseudocode of the algorithm
  - b. give the running time recurrence (recursive equation)
  - c. calculate the running time in  $\Theta$  notation
  
2. Use divide-and-conquer technique to search a number in the sorted list of  $n$  numbers.
  - a. Write the pseudocode of the algorithm.
  - b. Write the recursive running time equation (recurrence)
  - c. Guess the result of this recurrence