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Stock1 problem STARTS
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 a
O(n^2): Sold on day 0 for 5. Bought on day 0 for 5. Profit = 5-5 = 0
O(n^2) = 1 \text{ numDivide} = 0 \text{ numConquer} = 0
O(nlogn): Sold on day 0 for 5. Bought on day 0 for 5. Profit = 5-5=0
O(nlogn) = 0 numDivide = 0 numConquer = 0
O(n): Sold on day 0 for 5. Bought on day 0 for 5. Profit = 5-5 = 0
numDivide = 0 numConquer = 0
_____
 0 1
 6 5
O(n^2): Sold on day 0 for 6. Bought on day 0 for 6. Profit = 6-6 = 0
O(n^2) = 4 \text{ numDivide} = 1 \text{ numConquer} = 1
O(n\log n): Sold on day 0 for 6. Bought on day 0 for 6. Profit = 6-6 = 0
O(nlogn) = 2 numDivide = 0 numConquer = 0
O(n): Sold on day 0 for 6. Bought on day 0 for 6. Profit = 6-6 = 0
numDivide = 0 numConquer = 0
_____
 0 1 2
 1 2 3
O(n^2): Sold on day 2 for 3. Bought on day 0 for 1. Profit = 3-1 = 2
O(n^2) = 9 \text{ numDivide} = 3 \text{ numConquer} = 3
O(nlogn): Sold on day 2 for 3. Bought on day 0 for 1. Profit = 3-1=2
O(nlogn) = 4 numDivide = 1 numConquer = 1
O(n): Sold on day 2 for 3. Bought on day 0 for 1. Profit = 3-1 = 2
numDivide = 1 numConquer = 1
______
 0 1 2
 3 2 1
O(n^2): Sold on day 0 for 3. Bought on day 0 for 3. Profit = 3-3 = 0
O(n^2) = 9 \text{ numDivide} = 3 \text{ numConquer} = 3
O(n\log n): Sold on day 0 for 3. Bought on day 0 for 3. Profit = 3-3 = 0
O(nlogn) = 4 numDivide = 1 numConquer = 1
O(n): Sold on day 0 for 3. Bought on day 0 for 3. Profit = 3-3 = 0
numDivide = 1 numConquer = 1
 0 1 2 3 4
  5 10 4 6 12
O(n^2): Sold on day 4 for 12. Bought on day 2 for 4. Profit = 12-4 = 8
O(n^2) = 25 \text{ numDivide} = 10 \text{ numConquer} = 10
O(n\log n): Sold on day 4 for 12. Bought on day 2 for 4. Profit = 12-4=8
O(nlogn) = 11 numDivide = 2 numConquer = 2
O(n): Sold on day 4 for 12. Bought on day 2 for 4. Profit = 12-4=8
numDivide = 2 numConquer = 2
 0 1 2 3 4 5
 1 1 1 1 1 1
O(n^2): Sold on day 5 for 1. Bought on day 4 for 1. Profit = 1-1 = 0
O(n^2) = 36 \text{ numDivide} = 15 \text{ numConquer} = 15
O(n\log n): Sold on day 0 for 1. Bought on day 0 for 1. Profit = 1-1 = 0
O(nlogn) = 15 numDivide = 3 numConquer = 3
O(n): Sold on day 0 for 1. Bought on day 0 for 1. Profit = 1-1 = 0
numDivide = 3 numConquer = 3
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0 1 2 3 4 5 6
  1 2 3 4 5 6 7
O(n^2): Sold on day 6 for 7. Bought on day 0 for 1. Profit = 7-1 = 6
O(n^2) = 49 \text{ numDivide} = 21 \text{ numConquer} = 21
O(n\log n): Sold on day 6 for 7. Bought on day 0 for 1. Profit = 7-1 = 6
O(nlogn) = 19 numDivide = 3 numConquer = 3
O(n): Sold on day 6 for 7. Bought on day 0 for 1. Profit = 7-1 = 6
numDivide = 3 numConquer = 3
  0 1 2 3 4 5
     2 3 4 5
                     6
  1
O(n^2): Sold on day 5 for 6. Bought on day 0 for 1. Profit = 6-1 = 5
O(n^2) = 36 \text{ numDivide} = 15 \text{ numConquer} = 15
O(nlogn): Sold on day 5 for 6. Bought on day 0 for 1. Profit = 6-1 = 5
O(nlogn) = 15 numDivide = 3 numConquer = 3
O(n): Sold on day 5 for 6. Bought on day 0 for 1. Profit = 6-1 = 5
numDivide = 3 numConquer = 3
  0 1 2 3 4 5 6
      6 5
              4
                  3
                     2
                          1
O(n^2): Sold on day 0 for 7. Bought on day 0 for 7. Profit = 7-7 = 0
O(n^2) = 49 \text{ numDivide} = 21 \text{ numConquer} = 21
O(nlogn): Sold on day 0 for 7. Bought on day 0 for 7. Profit = 7-7 = 0
O(nlogn) = 19 numDivide = 3 numConquer = 3
O(n): Sold on day 0 for 7. Bought on day 0 for 7. Profit = 7-7 = 0
numDivide = 3 numConquer = 3
  0 1 2 3 4 5
  6 5 4
              3
                  2
                      1
O(n^2): Sold on day 0 for 6. Bought on day 0 for 6. Profit = 6-6 = 0
O(n^2) = 36 \text{ numDivide} = 15 \text{ numConquer} = 15
O(nlogn): Sold on day 0 for 6. Bought on day 0 for 6. Profit = 6-6 = 0
O(nlogn) = 15 numDivide = 3 numConquer = 3
O(n): Sold on day 0 for 6. Bought on day 0 for 6. Profit = 6-6 = 0
numDivide = 3 numConquer = 3
--- Array length is 1000
O(n^2): Sold on day 999 for 999. Bought on day 0 for 0. Profit = 999-0 = 999
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 999 for 999. Bought on day 0 for 0. Profit = 999-0 = 999
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 999 for 999. Bought on day 0 for 0. Profit = 999-0 = 999
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 0 for 999. Bought on day 0 for 999. Profit = 999-999 = 0
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 0 for 999. Bought on day 0 for 999. Profit = 999-999 = 0
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 0 for 999. Bought on day 0 for 999. Profit = 999-999 = 0
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 956 for 100. Bought on day 947 for 50. Profit = 100-50 = 50
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O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 168 for 100. Bought on day 136 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 168 for 100. Bought on day 136 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 984 for 100. Bought on day 894 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 38 for 100. Bought on day 29 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 38 for 100. Bought on day 29 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 958 for 100. Bought on day 927 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 185 for 100. Bought on day 165 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 185 for 100. Bought on day 165 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 931 for 100. Bought on day 877 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 84 for 100. Bought on day 77 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 84 for 100. Bought on day 77 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
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--- Array length is 1000
O(n^2): Sold on day 948 for 100. Bought on day 936 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 178 for 100. Bought on day 175 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 178 for 100. Bought on day 175 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
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--- Array length is 1000
O(n^2): Sold on day 986 for 100. Bought on day 972 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 88 for 100. Bought on day 65 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 88 for 100. Bought on day 65 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 977 for 100. Bought on day 966 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 153 for 100. Bought on day 58 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 153 for 100. Bought on day 58 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
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O(n^2): Sold on day 988 for 100. Bought on day 976 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 56 for 100. Bought on day 32 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 56 for 100. Bought on day 32 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 998 for 100. Bought on day 965 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 15 for 100. Bought on day 14 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 15 for 100. Bought on day 14 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 957 for 100. Bought on day 946 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 58 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 58 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 955 for 100. Bought on day 882 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 75 for 100. Bought on day 65 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 75 for 100. Bought on day 65 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 956 for 100. Bought on day 945 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 71 for 100. Bought on day 64 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 71 for 100. Bought on day 64 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
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--- Array length is 1000
O(n^2): Sold on day 908 for 100. Bought on day 757 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 149 for 100. Bought on day 136 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 149 for 100. Bought on day 136 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 950 for 100. Bought on day 938 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 179 for 100. Bought on day 173 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 179 for 100. Bought on day 173 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
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--- Array length is 1000
O(n^2): Sold on day 967 for 100. Bought on day 965 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 116 for 100. Bought on day 105 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 116 for 100. Bought on day 105 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 964 for 100. Bought on day 891 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 80 for 100. Bought on day 49 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 80 for 100. Bought on day 49 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 988 for 100. Bought on day 931 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 47 for 100. Bought on day 16 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 47 for 100. Bought on day 16 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 900 for 100. Bought on day 852 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 112 for 100. Bought on day 92 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 112 for 100. Bought on day 92 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 910 for 100. Bought on day 881 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 84 for 100. Bought on day 76 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 84 for 100. Bought on day 76 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 952 for 100. Bought on day 928 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 95 for 100. Bought on day 81 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 95 for 100. Bought on day 81 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 948 for 100. Bought on day 886 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 123 for 100. Bought on day 54 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 123 for 100. Bought on day 54 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
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--- Array length is 1000  $O(n^2)$ : Sold on day 972 for 100. Bought on day 950 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 98 for 100. Bought on day 47 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 98 for 100. Bought on day 47 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 942 for 100. Bought on day 903 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 169 for 100. Bought on day 144 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 169 for 100. Bought on day 144 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 997 for 100. Bought on day 943 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 31 for 100. Bought on day 30 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 31 for 100. Bought on day 30 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 . --- Array length is 1000  $O(n^2)$ : Sold on day 901 for 100. Bought on day 898 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 101 for 100. Bought on day 95 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 101 for 100. Bought on day 95 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 939 for 100. Bought on day 924 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 74 for 100. Bought on day 71 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 74 for 100. Bought on day 71 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 -------- Array length is 1000  $O(n^2)$ : Sold on day 934 for 100. Bought on day 870 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 57 for 100. Bought on day 36 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 57 for 100. Bought on day 36 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 944 for 100. Bought on day 939 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 103 for 100. Bought on day 48 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 103 for 100. Bought on day 48 for 50. Profit = 100-50 = 50

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numDivide = 511 numConquer = 511
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--- Array length is 1000
O(n^2): Sold on day 931 for 100. Bought on day 812 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 40 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 40 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 974 for 100. Bought on day 971 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 47 for 100. Bought on day 44 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 47 for 100. Bought on day 44 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 989 for 100. Bought on day 979 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 100 for 100. Bought on day 71 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 100 for 100. Bought on day 71 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 989 for 100. Bought on day 988 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 906 for 100. Bought on day 897 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 906 for 100. Bought on day 897 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 991 for 100. Bought on day 964 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 59 for 100. Bought on day 19 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 59 for 100. Bought on day 19 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 993 for 100. Bought on day 954 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 123 for 100. Bought on day 86 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 123 for 100. Bought on day 86 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 997 for 100. Bought on day 974 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 99 for 100. Bought on day 61 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
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O(n): Sold on day 99 for 100. Bought on day 61 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 989 for 100. Bought on day 985 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 112 for 100. Bought on day 97 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 112 for 100. Bought on day 97 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 831 for 100. Bought on day 810 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 59 for 100. Bought on day 19 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 59 for 100. Bought on day 19 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 963 for 100. Bought on day 958 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 104 for 100. Bought on day 74 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 104 for 100. Bought on day 74 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 978 for 100. Bought on day 901 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 38 for 100. Bought on day 30 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 38 for 100. Bought on day 30 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 962 for 100. Bought on day 936 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 224 for 100. Bought on day 128 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 224 for 100. Bought on day 128 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 936 for 100. Bought on day 884 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 62 for 100. Bought on day 17 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 62 for 100. Bought on day 17 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 940 for 100. Bought on day 907 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 5 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
```

```
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 5 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 991 for 100. Bought on day 951 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 480 for 100. Bought on day 476 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 480 for 100. Bought on day 476 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 948 for 100. Bought on day 929 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 202 for 100. Bought on day 171 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 202 for 100. Bought on day 171 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 918 for 100. Bought on day 759 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 142 for 100. Bought on day 134 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 142 for 100. Bought on day 134 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 974 for 100. Bought on day 932 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 52 for 100. Bought on day 32 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 52 for 100. Bought on day 32 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 942 for 100. Bought on day 938 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 41 for 100. Bought on day 38 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 41 for 100. Bought on day 38 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 850 for 100. Bought on day 822 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 29 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 29 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 871 for 100. Bought on day 854 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
```

```
O(nlogn): Sold on day 187 for 100. Bought on day 170 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 187 for 100. Bought on day 170 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 915 for 100. Bought on day 901 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 79 for 100. Bought on day 61 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 79 for 100. Bought on day 61 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 906 for 100. Bought on day 891 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 326 for 100. Bought on day 304 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 326 for 100. Bought on day 304 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 908 for 100. Bought on day 748 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 156 for 100. Bought on day 127 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 156 for 100. Bought on day 127 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 987 for 100. Bought on day 971 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 20 for 100. Bought on day 9 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 20 for 100. Bought on day 9 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 932 for 100. Bought on day 930 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 28 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 28 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 986 for 100. Bought on day 924 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 119 for 100. Bought on day 42 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 119 for 100. Bought on day 42 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 898 for 100. Bought on day 862 for 50. Profit = 100-50 = 50
```

```
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 87 for 100. Bought on day 14 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 87 for 100. Bought on day 14 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 984 for 100. Bought on day 982 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 51 for 100. Bought on day 43 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 51 for 100. Bought on day 43 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 993 for 100. Bought on day 975 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 126 for 100. Bought on day 62 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 126 for 100. Bought on day 62 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 948 for 100. Bought on day 893 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 247 for 100. Bought on day 223 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 247 for 100. Bought on day 223 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 960 for 100. Bought on day 915 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 111 for 100. Bought on day 108 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 111 for 100. Bought on day 108 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 959 for 100. Bought on day 952 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 87 for 100. Bought on day 74 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 87 for 100. Bought on day 74 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 972 for 100. Bought on day 899 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 149 for 100. Bought on day 132 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 149 for 100. Bought on day 132 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

```
O(n^2): Sold on day 939 for 100. Bought on day 916 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 95 for 100. Bought on day 63 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 95 for 100. Bought on day 63 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 929 for 100. Bought on day 906 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 83 for 100. Bought on day 80 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 83 for 100. Bought on day 80 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 880 for 100. Bought on day 877 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 94 for 100. Bought on day 75 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 94 for 100. Bought on day 75 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 820 for 100. Bought on day 711 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 91 for 100. Bought on day 86 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 91 for 100. Bought on day 86 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 991 for 100. Bought on day 942 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 74 for 100. Bought on day 22 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 74 for 100. Bought on day 22 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 990 for 100. Bought on day 943 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 121 for 100. Bought on day 71 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 121 for 100. Bought on day 71 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 982 for 100. Bought on day 861 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 47 for 100. Bought on day 42 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 47 for 100. Bought on day 42 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
```

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--- Array length is 1000
O(n^2): Sold on day 958 for 100. Bought on day 827 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 84 for 100. Bought on day 79 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 84 for 100. Bought on day 79 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 989 for 100. Bought on day 938 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 166 for 100. Bought on day 163 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 166 for 100. Bought on day 163 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 960 for 100. Bought on day 957 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 124 for 100. Bought on day 64 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 124 for 100. Bought on day 64 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 956 for 100. Bought on day 943 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 50 for 100. Bought on day 14 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 50 for 100. Bought on day 14 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 954 for 100. Bought on day 950 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 184 for 100. Bought on day 149 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 184 for 100. Bought on day 149 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 933 for 100. Bought on day 922 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 51 for 100. Bought on day 44 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 51 for 100. Bought on day 44 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 964 for 100. Bought on day 959 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 160 for 100. Bought on day 141 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 160 for 100. Bought on day 141 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

--- Array length is 1000  $O(n^2)$ : Sold on day 873 for 100. Bought on day 816 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 38 for 100. Bought on day 34 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 38 for 100. Bought on day 34 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 936 for 100. Bought on day 915 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 58 for 100. Bought on day 49 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 58 for 100. Bought on day 49 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 993 for 100. Bought on day 890 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 167 for 100. Bought on day 147 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 167 for 100. Bought on day 147 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 . --- Array length is 1000  $O(n^2)$ : Sold on day 985 for 100. Bought on day 955 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 90 for 100. Bought on day 60 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 90 for 100. Bought on day 60 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 968 for 100. Bought on day 915 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 240 for 100. Bought on day 220 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 240 for 100. Bought on day 220 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 -------- Array length is 1000  $O(n^2)$ : Sold on day 933 for 100. Bought on day 840 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 116 for 100. Bought on day 80 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 116 for 100. Bought on day 80 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 944 for 100. Bought on day 874 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 83 for 100. Bought on day 71 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 83 for 100. Bought on day 71 for 50. Profit = 100-50 = 50

```
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 985 for 100. Bought on day 915 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 177 for 100. Bought on day 147 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 177 for 100. Bought on day 147 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 977 for 100. Bought on day 925 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 209 for 100. Bought on day 70 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 209 for 100. Bought on day 70 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 975 for 100. Bought on day 850 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 52 for 100. Bought on day 24 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 52 for 100. Bought on day 24 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 797 for 100. Bought on day 703 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 245 for 100. Bought on day 238 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 245 for 100. Bought on day 238 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 968 for 100. Bought on day 943 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 114 for 100. Bought on day 103 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 114 for 100. Bought on day 103 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 940 for 100. Bought on day 931 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 88 for 100. Bought on day 83 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 88 for 100. Bought on day 83 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 883 for 100. Bought on day 880 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 102 for 100. Bought on day 97 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
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O(n): Sold on day 102 for 100. Bought on day 97 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 939 for 100. Bought on day 892 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 167 for 100. Bought on day 164 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 167 for 100. Bought on day 164 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 992 for 100. Bought on day 977 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 76 for 100. Bought on day 70 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 76 for 100. Bought on day 70 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 989 for 100. Bought on day 947 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 47 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 47 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 908 for 100. Bought on day 827 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 122 for 100. Bought on day 98 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 122 for 100. Bought on day 98 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 945 for 100. Bought on day 939 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 106 for 100. Bought on day 42 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 106 for 100. Bought on day 42 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 980 for 100. Bought on day 926 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 184 for 100. Bought on day 124 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 184 for 100. Bought on day 124 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 988 for 100. Bought on day 914 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
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O(nlogn): Sold on day 184 for 100. Bought on day 144 for 50. Profit = 100-50 = 50

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O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 184 for 100. Bought on day 144 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 974 for 100. Bought on day 922 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 22 for 100. Bought on day 1 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 22 for 100. Bought on day 1 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 992 for 100. Bought on day 973 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 88 for 100. Bought on day 69 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 88 for 100. Bought on day 69 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 996 for 100. Bought on day 992 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 96 for 100. Bought on day 69 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 96 for 100. Bought on day 69 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 998 for 100. Bought on day 966 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 95 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 95 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 930 for 100. Bought on day 927 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 20 for 100. Bought on day 3 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 20 for 100. Bought on day 3 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 985 for 100. Bought on day 918 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 76 for 100. Bought on day 73 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 76 for 100. Bought on day 73 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 927 for 100. Bought on day 901 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
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O(n\log n): Sold on day 93 for 100. Bought on day 44 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 93 for 100. Bought on day 44 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 981 for 100. Bought on day 912 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 15 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 15 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 991 for 100. Bought on day 931 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 74 for 100. Bought on day 70 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 74 for 100. Bought on day 70 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 987 for 100. Bought on day 953 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 112 for 100. Bought on day 54 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 112 for 100. Bought on day 54 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 979 for 100. Bought on day 916 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 54 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 54 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 990 for 100. Bought on day 953 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 44 for 100. Bought on day 34 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 44 for 100. Bought on day 34 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 964 for 100. Bought on day 949 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 46 for 100. Bought on day 45 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 46 for 100. Bought on day 45 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 948 for 100. Bought on day 899 for 50. Profit = 100-50 = 50
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O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 90 for 100. Bought on day 85 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 90 for 100. Bought on day 85 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 985 for 100. Bought on day 979 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 67 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 67 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 997 for 100. Bought on day 956 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 62 for 100. Bought on day 51 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 62 for 100. Bought on day 51 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 968 for 100. Bought on day 937 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 8 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 8 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 976 for 100. Bought on day 917 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 56 for 100. Bought on day 5 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 56 for 100. Bought on day 5 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 950 for 100. Bought on day 926 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 150 for 100. Bought on day 128 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 150 for 100. Bought on day 128 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 843 for 100. Bought on day 842 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 201 for 100. Bought on day 141 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 201 for 100. Bought on day 141 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
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O(n^2): Sold on day 958 for 100. Bought on day 905 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 17 for 100. Bought on day 15 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 17 for 100. Bought on day 15 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 994 for 100. Bought on day 965 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 179 for 100. Bought on day 146 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 179 for 100. Bought on day 146 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 932 for 100. Bought on day 858 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 123 for 100. Bought on day 104 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 123 for 100. Bought on day 104 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 947 for 100. Bought on day 903 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 204 for 100. Bought on day 141 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 204 for 100. Bought on day 141 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 999 for 100. Bought on day 986 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 52 for 100. Bought on day 39 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 52 for 100. Bought on day 39 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 987 for 100. Bought on day 983 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 118 for 100. Bought on day 107 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 118 for 100. Bought on day 107 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 957 for 100. Bought on day 806 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 249 for 100. Bought on day 238 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 249 for 100. Bought on day 238 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
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--- Array length is 1000
O(n^2): Sold on day 912 for 100. Bought on day 910 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 115 for 100. Bought on day 88 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 115 for 100. Bought on day 88 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 973 for 100. Bought on day 964 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 154 for 100. Bought on day 131 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 154 for 100. Bought on day 131 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 977 for 100. Bought on day 964 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 31 for 100. Bought on day 23 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 31 for 100. Bought on day 23 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 917 for 100. Bought on day 874 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 93 for 100. Bought on day 91 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 93 for 100. Bought on day 91 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 974 for 100. Bought on day 905 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 249 for 100. Bought on day 74 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 249 for 100. Bought on day 74 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 979 for 100. Bought on day 859 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 124 for 100. Bought on day 122 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 124 for 100. Bought on day 122 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 973 for 100. Bought on day 882 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 133 for 100. Bought on day 76 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 133 for 100. Bought on day 76 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

--- Array length is 1000  $O(n^2)$ : Sold on day 977 for 100. Bought on day 951 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 116 for 100. Bought on day 107 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 116 for 100. Bought on day 107 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 983 for 100. Bought on day 982 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 77 for 100. Bought on day 65 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 77 for 100. Bought on day 65 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 918 for 100. Bought on day 894 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 61 for 100. Bought on day 25 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 61 for 100. Bought on day 25 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 . --- Array length is 1000  $O(n^2)$ : Sold on day 942 for 100. Bought on day 759 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 190 for 100. Bought on day 188 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511O(n): Sold on day 190 for 100. Bought on day 188 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 \_\_\_\_\_ --- Array length is 1000  $O(n^2)$ : Sold on day 968 for 100. Bought on day 904 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 65 for 100. Bought on day 30 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 65 for 100. Bought on day 30 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 -------- Array length is 1000  $O(n^2)$ : Sold on day 957 for 100. Bought on day 867 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 48 for 100. Bought on day 41 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 48 for 100. Bought on day 41 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 988 for 100. Bought on day 862 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 37 for 100. Bought on day 30 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 37 for 100. Bought on day 30 for 50. Profit = 100-50 = 50

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numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 946 for 100. Bought on day 903 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 155 for 100. Bought on day 143 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 155 for 100. Bought on day 143 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 894 for 100. Bought on day 822 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 34 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 34 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 988 for 100. Bought on day 926 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 122 for 100. Bought on day 32 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 122 for 100. Bought on day 32 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 817 for 100. Bought on day 800 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 207 for 100. Bought on day 184 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 207 for 100. Bought on day 184 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 970 for 100. Bought on day 963 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 44 for 100. Bought on day 18 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 44 for 100. Bought on day 18 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 987 for 100. Bought on day 946 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 48 for 100. Bought on day 36 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 48 for 100. Bought on day 36 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 981 for 100. Bought on day 875 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 33 for 100. Bought on day 27 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
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O(n): Sold on day 33 for 100. Bought on day 27 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 664 for 100. Bought on day 631 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 274 for 100. Bought on day 265 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 274 for 100. Bought on day 265 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 986 for 100. Bought on day 984 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 32 for 100. Bought on day 29 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 32 for 100. Bought on day 29 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 986 for 100. Bought on day 979 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 91 for 100. Bought on day 83 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 91 for 100. Bought on day 83 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 990 for 100. Bought on day 856 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 86 for 100. Bought on day 60 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 86 for 100. Bought on day 60 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 994 for 100. Bought on day 990 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 225 for 100. Bought on day 145 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 225 for 100. Bought on day 145 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 986 for 100. Bought on day 919 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 74 for 100. Bought on day 73 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 74 for 100. Bought on day 73 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 970 for 100. Bought on day 929 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 38 for 100. Bought on day 32 for 50. Profit = 100-50 = 50
```

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O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 38 for 100. Bought on day 32 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 995 for 100. Bought on day 855 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 76 for 100. Bought on day 73 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 76 for 100. Bought on day 73 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 992 for 100. Bought on day 981 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 121 for 100. Bought on day 108 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 121 for 100. Bought on day 108 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 853 for 100. Bought on day 813 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 26 for 100. Bought on day 22 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 26 for 100. Bought on day 22 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 854 for 100. Bought on day 805 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 124 for 100. Bought on day 42 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 124 for 100. Bought on day 42 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 996 for 100. Bought on day 984 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 177 for 100. Bought on day 125 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 \text{ numDivide} = 511 \text{ numConquer} = 511
O(n): Sold on day 177 for 100. Bought on day 125 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 885 for 100. Bought on day 819 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 53 for 100. Bought on day 20 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 53 for 100. Bought on day 20 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 962 for 100. Bought on day 933 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
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O(nlogn): Sold on day 225 for 100. Bought on day 210 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 225 for 100. Bought on day 210 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 918 for 100. Bought on day 856 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 123 for 100. Bought on day 118 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 123 for 100. Bought on day 118 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 960 for 100. Bought on day 946 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 173 for 100. Bought on day 171 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 173 for 100. Bought on day 171 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 984 for 100. Bought on day 873 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 99 for 100. Bought on day 39 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 99 for 100. Bought on day 39 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 888 for 100. Bought on day 828 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 161 for 100. Bought on day 152 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 161 for 100. Bought on day 152 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 930 for 100. Bought on day 925 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 60 for 100. Bought on day 22 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 60 for 100. Bought on day 22 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 991 for 100. Bought on day 917 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 175 for 100. Bought on day 141 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 175 for 100. Bought on day 141 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 976 for 100. Bought on day 959 for 50. Profit = 100-50 = 50
```

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O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 228 for 100. Bought on day 220 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 228 for 100. Bought on day 220 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 791 for 100. Bought on day 699 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 49 for 100. Bought on day 47 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 49 for 100. Bought on day 47 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 963 for 100. Bought on day 953 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 120 for 100. Bought on day 102 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 120 for 100. Bought on day 102 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 715 for 100. Bought on day 682 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 121 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 121 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 972 for 100. Bought on day 887 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 101 for 100. Bought on day 1 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 101 for 100. Bought on day 1 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 977 for 100. Bought on day 935 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 105 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 105 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 990 for 100. Bought on day 976 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 48 for 100. Bought on day 46 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 48 for 100. Bought on day 46 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

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O(n^2): Sold on day 997 for 100. Bought on day 990 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 27 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 27 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 991 for 100. Bought on day 929 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 62 for 100. Bought on day 57 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 62 for 100. Bought on day 57 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 948 for 100. Bought on day 941 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 23 for 100. Bought on day 22 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 23 for 100. Bought on day 22 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 674 for 100. Bought on day 642 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 218 for 100. Bought on day 46 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 218 for 100. Bought on day 46 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 769 for 100. Bought on day 751 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 41 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 41 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 989 for 100. Bought on day 826 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 30 for 100. Bought on day 1 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 30 for 100. Bought on day 1 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 992 for 100. Bought on day 988 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 72 for 100. Bought on day 67 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 72 for 100. Bought on day 67 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
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--- Array length is 1000
O(n^2): Sold on day 986 for 100. Bought on day 983 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 102 for 100. Bought on day 50 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 102 for 100. Bought on day 50 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 994 for 100. Bought on day 890 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 204 for 100. Bought on day 199 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 204 for 100. Bought on day 199 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 925 for 100. Bought on day 855 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 56 for 100. Bought on day 54 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 56 for 100. Bought on day 54 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 982 for 100. Bought on day 924 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 79 for 100. Bought on day 75 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 79 for 100. Bought on day 75 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 917 for 100. Bought on day 911 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 54 for 100. Bought on day 34 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 54 for 100. Bought on day 34 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 953 for 100. Bought on day 927 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 33 for 100. Bought on day 24 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 33 for 100. Bought on day 24 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 988 for 100. Bought on day 974 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 160 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 160 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

--- Array length is 1000  $O(n^2)$ : Sold on day 968 for 100. Bought on day 926 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 87 for 100. Bought on day 70 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 87 for 100. Bought on day 70 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 964 for 100. Bought on day 874 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 6 for 100. Bought on day 5 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 6 for 100. Bought on day 5 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 960 for 100. Bought on day 846 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 13 for 100. Bought on day 4 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 13 for 100. Bought on day 4 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 . --- Array length is 1000  $O(n^2)$ : Sold on day 985 for 100. Bought on day 960 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 67 for 100. Bought on day 64 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 67 for 100. Bought on day 64 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 989 for 100. Bought on day 974 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 98 for 100. Bought on day 74 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 98 for 100. Bought on day 74 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 -------- Array length is 1000  $O(n^2)$ : Sold on day 996 for 100. Bought on day 982 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 41 for 100. Bought on day 28 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 41 for 100. Bought on day 28 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 886 for 100. Bought on day 867 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 70 for 100. Bought on day 36 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 70 for 100. Bought on day 36 for 50. Profit = 100-50 = 50

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numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 998 for 100. Bought on day 914 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 73 for 100. Bought on day 72 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 73 for 100. Bought on day 72 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 983 for 100. Bought on day 852 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 107 for 100. Bought on day 104 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 107 for 100. Bought on day 104 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 991 for 100. Bought on day 988 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 42 for 100. Bought on day 23 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 42 for 100. Bought on day 23 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 970 for 100. Bought on day 921 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 124 for 100. Bought on day 47 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 124 for 100. Bought on day 47 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 897 for 100. Bought on day 888 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 15 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 15 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 915 for 100. Bought on day 800 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 79 for 100. Bought on day 67 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 79 for 100. Bought on day 67 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 947 for 100. Bought on day 938 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 49 for 100. Bought on day 34 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
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O(n): Sold on day 49 for 100. Bought on day 34 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 937 for 100. Bought on day 861 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 107 for 100. Bought on day 104 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 107 for 100. Bought on day 104 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 960 for 100. Bought on day 912 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 62 for 100. Bought on day 60 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 62 for 100. Bought on day 60 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 976 for 100. Bought on day 915 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 102 for 100. Bought on day 99 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 102 for 100. Bought on day 99 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 997 for 100. Bought on day 985 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 27 for 100. Bought on day 22 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 27 for 100. Bought on day 22 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 953 for 100. Bought on day 910 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 38 for 100. Bought on day 19 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 38 for 100. Bought on day 19 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 967 for 100. Bought on day 947 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 147 for 100. Bought on day 140 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 147 for 100. Bought on day 140 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 977 for 100. Bought on day 902 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
```

O(nlogn): Sold on day 83 for 100. Bought on day 82 for 50. Profit = 100-50 = 50

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O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 83 for 100. Bought on day 82 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 988 for 100. Bought on day 975 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 113 for 100. Bought on day 103 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 113 for 100. Bought on day 103 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 988 for 100. Bought on day 967 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 161 for 100. Bought on day 126 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 161 for 100. Bought on day 126 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 955 for 100. Bought on day 867 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 58 for 100. Bought on day 6 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 58 for 100. Bought on day 6 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 957 for 100. Bought on day 929 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 248 for 100. Bought on day 224 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 248 for 100. Bought on day 224 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 973 for 100. Bought on day 758 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 115 for 100. Bought on day 100 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 115 for 100. Bought on day 100 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 988 for 100. Bought on day 943 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 99 for 100. Bought on day 7 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 99 for 100. Bought on day 7 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 944 for 100. Bought on day 892 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
```

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O(n\log n): Sold on day 88 for 100. Bought on day 77 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 88 for 100. Bought on day 77 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 975 for 100. Bought on day 913 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 224 for 100. Bought on day 210 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 224 for 100. Bought on day 210 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 923 for 100. Bought on day 874 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 49 for 100. Bought on day 25 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 49 for 100. Bought on day 25 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 931 for 100. Bought on day 919 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 10 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 10 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 988 for 100. Bought on day 827 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 93 for 100. Bought on day 72 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 93 for 100. Bought on day 72 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 979 for 100. Bought on day 925 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 78 for 100. Bought on day 65 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 78 for 100. Bought on day 65 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 998 for 100. Bought on day 965 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 23 for 100. Bought on day 6 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 23 for 100. Bought on day 6 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 977 for 100. Bought on day 931 for 50. Profit = 100-50 = 50
```

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O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 143 for 100. Bought on day 102 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 143 for 100. Bought on day 102 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 934 for 100. Bought on day 903 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 62 for 100. Bought on day 53 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 62 for 100. Bought on day 53 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 946 for 100. Bought on day 845 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 79 for 100. Bought on day 75 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 79 for 100. Bought on day 75 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 987 for 100. Bought on day 913 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 107 for 100. Bought on day 45 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 107 for 100. Bought on day 45 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 817 for 100. Bought on day 741 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 39 for 100. Bought on day 36 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 39 for 100. Bought on day 36 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 964 for 100. Bought on day 893 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 83 for 100. Bought on day 44 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 83 for 100. Bought on day 44 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 986 for 100. Bought on day 909 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 81 for 100. Bought on day 37 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 81 for 100. Bought on day 37 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

```
O(n^2): Sold on day 942 for 100. Bought on day 909 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 233 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 233 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 959 for 100. Bought on day 950 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 135 for 100. Bought on day 131 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 135 for 100. Bought on day 131 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 851 for 100. Bought on day 819 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 183 for 100. Bought on day 173 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 183 for 100. Bought on day 173 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 974 for 100. Bought on day 941 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 4 for 100. Bought on day 3 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 4 for 100. Bought on day 3 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 965 for 100. Bought on day 941 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 120 for 100. Bought on day 39 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 120 for 100. Bought on day 39 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 959 for 100. Bought on day 921 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 231 for 100. Bought on day 198 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 231 for 100. Bought on day 198 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 912 for 100. Bought on day 784 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 241 for 100. Bought on day 155 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 241 for 100. Bought on day 155 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
```

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--- Array length is 1000
O(n^2): Sold on day 953 for 100. Bought on day 932 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 21 for 100. Bought on day 20 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 21 for 100. Bought on day 20 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 916 for 100. Bought on day 903 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 177 for 100. Bought on day 175 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 177 for 100. Bought on day 175 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 872 for 100. Bought on day 860 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 91 for 100. Bought on day 87 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 91 for 100. Bought on day 87 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 938 for 100. Bought on day 936 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 76 for 100. Bought on day 65 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 76 for 100. Bought on day 65 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 978 for 100. Bought on day 909 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 86 for 100. Bought on day 69 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 86 for 100. Bought on day 69 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 934 for 100. Bought on day 790 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 83 for 100. Bought on day 75 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 83 for 100. Bought on day 75 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 934 for 100. Bought on day 816 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 57 for 100. Bought on day 51 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 57 for 100. Bought on day 51 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

--- Array length is 1000  $O(n^2)$ : Sold on day 974 for 100. Bought on day 887 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 129 for 100. Bought on day 127 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511O(n): Sold on day 129 for 100. Bought on day 127 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 935 for 100. Bought on day 887 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 172 for 100. Bought on day 158 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 172 for 100. Bought on day 158 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 978 for 100. Bought on day 880 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 185 for 100. Bought on day 150 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 185 for 100. Bought on day 150 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 . --- Array length is 1000  $O(n^2)$ : Sold on day 982 for 100. Bought on day 947 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 100 for 100. Bought on day 53 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 100 for 100. Bought on day 53 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 \_\_\_\_\_ --- Array length is 1000  $O(n^2)$ : Sold on day 947 for 100. Bought on day 896 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 80 for 100. Bought on day 67 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 80 for 100. Bought on day 67 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 -------- Array length is 1000  $O(n^2)$ : Sold on day 925 for 100. Bought on day 894 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 70 for 100. Bought on day 21 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 70 for 100. Bought on day 21 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 931 for 100. Bought on day 930 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 112 for 100. Bought on day 103 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 112 for 100. Bought on day 103 for 50. Profit = 100-50 = 50

```
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 851 for 100. Bought on day 840 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 386 for 100. Bought on day 385 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 386 for 100. Bought on day 385 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 996 for 100. Bought on day 966 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 23 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 23 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 940 for 100. Bought on day 938 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 79 for 100. Bought on day 47 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 79 for 100. Bought on day 47 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 941 for 100. Bought on day 922 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 42 for 100. Bought on day 24 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 42 for 100. Bought on day 24 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 967 for 100. Bought on day 943 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 75 for 100. Bought on day 66 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 75 for 100. Bought on day 66 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 936 for 100. Bought on day 913 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 66 for 100. Bought on day 14 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 66 for 100. Bought on day 14 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 942 for 100. Bought on day 935 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 92 for 100. Bought on day 91 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
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O(n): Sold on day 92 for 100. Bought on day 91 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 997 for 100. Bought on day 973 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 486 for 100. Bought on day 442 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 486 for 100. Bought on day 442 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 891 for 100. Bought on day 884 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 44 for 100. Bought on day 43 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 44 for 100. Bought on day 43 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 969 for 100. Bought on day 905 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 100 for 100. Bought on day 95 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 100 for 100. Bought on day 95 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 966 for 100. Bought on day 964 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 50 for 100. Bought on day 33 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 50 for 100. Bought on day 33 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 989 for 100. Bought on day 988 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 41 for 100. Bought on day 32 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 41 for 100. Bought on day 32 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 983 for 100. Bought on day 830 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 82 for 100. Bought on day 69 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 82 for 100. Bought on day 69 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 824 for 100. Bought on day 812 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 90 for 100. Bought on day 88 for 50. Profit = 100-50 = 50
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O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 90 for 100. Bought on day 88 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 872 for 100. Bought on day 861 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 85 for 100. Bought on day 43 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 85 for 100. Bought on day 43 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 991 for 100. Bought on day 940 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 166 for 100. Bought on day 158 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 166 for 100. Bought on day 158 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 975 for 100. Bought on day 913 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 238 for 100. Bought on day 217 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 238 for 100. Bought on day 217 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 973 for 100. Bought on day 926 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 244 for 100. Bought on day 129 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 244 for 100. Bought on day 129 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 990 for 100. Bought on day 988 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 53 for 100. Bought on day 19 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 53 for 100. Bought on day 19 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 892 for 100. Bought on day 878 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 6 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 6 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 983 for 100. Bought on day 977 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
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O(n\log n): Sold on day 54 for 100. Bought on day 30 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 54 for 100. Bought on day 30 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 943 for 100. Bought on day 927 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 41 for 100. Bought on day 17 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 41 for 100. Bought on day 17 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 943 for 100. Bought on day 797 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 269 for 100. Bought on day 266 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 269 for 100. Bought on day 266 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 980 for 100. Bought on day 905 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 108 for 100. Bought on day 84 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 108 for 100. Bought on day 84 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 987 for 100. Bought on day 974 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 90 for 100. Bought on day 77 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 90 for 100. Bought on day 77 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 924 for 100. Bought on day 913 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 22 for 100. Bought on day 6 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 22 for 100. Bought on day 6 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 997 for 100. Bought on day 952 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 147 for 100. Bought on day 144 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 147 for 100. Bought on day 144 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
```

 $O(n^2)$ : Sold on day 990 for 100. Bought on day 967 for 50. Profit = 100-50 = 50

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O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 160 for 100. Bought on day 139 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 160 for 100. Bought on day 139 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 990 for 100. Bought on day 820 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 85 for 100. Bought on day 52 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 85 for 100. Bought on day 52 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 941 for 100. Bought on day 888 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 92 for 100. Bought on day 89 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 92 for 100. Bought on day 89 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 905 for 100. Bought on day 825 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 297 for 100. Bought on day 145 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 297 for 100. Bought on day 145 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 936 for 100. Bought on day 817 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 18 for 100. Bought on day 9 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 18 for 100. Bought on day 9 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 923 for 100. Bought on day 738 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 62 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 62 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 995 for 100. Bought on day 833 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 147 for 100. Bought on day 136 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 147 for 100. Bought on day 136 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

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O(n^2): Sold on day 936 for 100. Bought on day 927 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 122 for 100. Bought on day 119 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 122 for 100. Bought on day 119 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 972 for 100. Bought on day 929 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 43 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 43 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 962 for 100. Bought on day 887 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 98 for 100. Bought on day 84 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 98 for 100. Bought on day 84 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 977 for 100. Bought on day 870 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 34 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 34 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 934 for 100. Bought on day 758 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 207 for 100. Bought on day 144 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 207 for 100. Bought on day 144 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 972 for 100. Bought on day 955 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 147 for 100. Bought on day 133 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 147 for 100. Bought on day 133 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 978 for 100. Bought on day 859 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 217 for 100. Bought on day 188 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 217 for 100. Bought on day 188 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
```

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--- Array length is 1000
O(n^2): Sold on day 936 for 100. Bought on day 861 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 5 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 5 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 984 for 100. Bought on day 943 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 116 for 100. Bought on day 34 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 116 for 100. Bought on day 34 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 976 for 100. Bought on day 804 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 165 for 100. Bought on day 135 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 165 for 100. Bought on day 135 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 891 for 100. Bought on day 873 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 146 for 100. Bought on day 128 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 146 for 100. Bought on day 128 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 949 for 100. Bought on day 913 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 81 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 81 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 941 for 100. Bought on day 902 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 86 for 100. Bought on day 69 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 86 for 100. Bought on day 69 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 981 for 100. Bought on day 834 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 30 for 100. Bought on day 29 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 30 for 100. Bought on day 29 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

--- Array length is 1000  $O(n^2)$ : Sold on day 988 for 100. Bought on day 911 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 22 for 100. Bought on day 17 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 22 for 100. Bought on day 17 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 971 for 100. Bought on day 933 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 8 for 100. Bought on day 3 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 8 for 100. Bought on day 3 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 993 for 100. Bought on day 923 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 85 for 100. Bought on day 79 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 85 for 100. Bought on day 79 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 . --- Array length is 1000  $O(n^2)$ : Sold on day 979 for 100. Bought on day 839 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 217 for 100. Bought on day 197 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 217 for 100. Bought on day 197 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 899 for 100. Bought on day 801 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 91 for 100. Bought on day 73 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 91 for 100. Bought on day 73 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 -------- Array length is 1000  $O(n^2)$ : Sold on day 933 for 100. Bought on day 924 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 32 for 100. Bought on day 25 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 32 for 100. Bought on day 25 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 874 for 100. Bought on day 866 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 25 for 100. Bought on day 14 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 25 for 100. Bought on day 14 for 50. Profit = 100-50 = 50

```
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 952 for 100. Bought on day 911 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 176 for 100. Bought on day 134 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 176 for 100. Bought on day 134 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 949 for 100. Bought on day 903 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 211 for 100. Bought on day 202 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 211 for 100. Bought on day 202 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 882 for 100. Bought on day 846 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 204 for 100. Bought on day 25 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 204 for 100. Bought on day 25 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 965 for 100. Bought on day 938 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 19 for 100. Bought on day 17 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 19 for 100. Bought on day 17 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 982 for 100. Bought on day 891 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 78 for 100. Bought on day 64 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 78 for 100. Bought on day 64 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 987 for 100. Bought on day 922 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 15 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 15 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 925 for 100. Bought on day 893 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 106 for 100. Bought on day 80 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
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O(n): Sold on day 106 for 100. Bought on day 80 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 963 for 100. Bought on day 925 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 98 for 100. Bought on day 95 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 98 for 100. Bought on day 95 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 977 for 100. Bought on day 743 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 156 for 100. Bought on day 146 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 156 for 100. Bought on day 146 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 958 for 100. Bought on day 951 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 35 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 35 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 899 for 100. Bought on day 879 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 87 for 100. Bought on day 67 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 87 for 100. Bought on day 67 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 946 for 100. Bought on day 927 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 30 for 100. Bought on day 1 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 30 for 100. Bought on day 1 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 968 for 100. Bought on day 934 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 53 for 100. Bought on day 48 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 53 for 100. Bought on day 48 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 945 for 100. Bought on day 934 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 60 for 100. Bought on day 55 for 50. Profit = 100-50 = 50
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O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 60 for 100. Bought on day 55 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 966 for 100. Bought on day 889 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 109 for 100. Bought on day 77 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 109 for 100. Bought on day 77 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 963 for 100. Bought on day 868 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 99 for 100. Bought on day 98 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 99 for 100. Bought on day 98 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 949 for 100. Bought on day 917 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 36 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 36 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 941 for 100. Bought on day 930 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 60 for 100. Bought on day 37 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 60 for 100. Bought on day 37 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 917 for 100. Bought on day 830 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 40 for 100. Bought on day 26 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 40 for 100. Bought on day 26 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 952 for 100. Bought on day 851 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 2 for 100. Bought on day 1 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 2 for 100. Bought on day 1 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 944 for 100. Bought on day 927 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
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O(nlogn): Sold on day 116 for 100. Bought on day 94 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 116 for 100. Bought on day 94 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 961 for 100. Bought on day 895 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 54 for 100. Bought on day 23 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 54 for 100. Bought on day 23 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 897 for 100. Bought on day 826 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 130 for 100. Bought on day 127 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 130 for 100. Bought on day 127 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 856 for 100. Bought on day 823 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 97 for 100. Bought on day 66 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 97 for 100. Bought on day 66 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 922 for 100. Bought on day 912 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 131 for 100. Bought on day 126 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 131 for 100. Bought on day 126 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 948 for 100. Bought on day 887 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 58 for 100. Bought on day 36 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 58 for 100. Bought on day 36 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 960 for 100. Bought on day 835 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 114 for 100. Bought on day 105 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 114 for 100. Bought on day 105 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
```

 $O(n^2)$ : Sold on day 970 for 100. Bought on day 959 for 50. Profit = 100-50 = 50

```
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 17 for 100. Bought on day 16 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 17 for 100. Bought on day 16 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 986 for 100. Bought on day 881 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 96 for 100. Bought on day 58 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 96 for 100. Bought on day 58 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 881 for 100. Bought on day 778 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 110 for 100. Bought on day 59 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 110 for 100. Bought on day 59 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 954 for 100. Bought on day 919 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 29 for 100. Bought on day 14 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 29 for 100. Bought on day 14 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 976 for 100. Bought on day 903 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 104 for 100. Bought on day 102 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 104 for 100. Bought on day 102 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 966 for 100. Bought on day 891 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 301 for 100. Bought on day 298 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 301 for 100. Bought on day 298 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 984 for 100. Bought on day 923 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 49 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 49 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

```
O(n^2): Sold on day 971 for 100. Bought on day 938 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 372 for 100. Bought on day 272 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 372 for 100. Bought on day 272 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 958 for 100. Bought on day 957 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 211 for 100. Bought on day 190 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 211 for 100. Bought on day 190 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 966 for 100. Bought on day 951 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 117 for 100. Bought on day 96 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 117 for 100. Bought on day 96 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 997 for 100. Bought on day 868 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 116 for 100. Bought on day 86 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 116 for 100. Bought on day 86 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 979 for 100. Bought on day 964 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 23 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 23 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 949 for 100. Bought on day 926 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 36 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 36 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 991 for 100. Bought on day 968 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 221 for 100. Bought on day 169 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 221 for 100. Bought on day 169 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
```

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--- Array length is 1000
O(n^2): Sold on day 905 for 100. Bought on day 900 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 10 for 100. Bought on day 9 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 10 for 100. Bought on day 9 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 984 for 100. Bought on day 921 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 140 for 100. Bought on day 116 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 140 for 100. Bought on day 116 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 985 for 100. Bought on day 922 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 42 for 100. Bought on day 18 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 42 for 100. Bought on day 18 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 988 for 100. Bought on day 965 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 29 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 29 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 862 for 100. Bought on day 836 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 113 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 113 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 966 for 100. Bought on day 914 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 122 for 100. Bought on day 85 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 122 for 100. Bought on day 85 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 963 for 100. Bought on day 959 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 327 for 100. Bought on day 323 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 327 for 100. Bought on day 323 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

--- Array length is 1000  $O(n^2)$ : Sold on day 964 for 100. Bought on day 889 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 149 for 100. Bought on day 37 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 149 for 100. Bought on day 37 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 955 for 100. Bought on day 935 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 158 for 100. Bought on day 137 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 158 for 100. Bought on day 137 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 996 for 100. Bought on day 936 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 64 for 100. Bought on day 54 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 64 for 100. Bought on day 54 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 . --- Array length is 1000  $O(n^2)$ : Sold on day 954 for 100. Bought on day 914 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 486 for 100. Bought on day 335 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 486 for 100. Bought on day 335 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 \_\_\_\_\_ --- Array length is 1000  $O(n^2)$ : Sold on day 947 for 100. Bought on day 878 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 110 for 100. Bought on day 68 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 110 for 100. Bought on day 68 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 -------- Array length is 1000  $O(n^2)$ : Sold on day 922 for 100. Bought on day 889 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 215 for 100. Bought on day 148 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 215 for 100. Bought on day 148 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 886 for 100. Bought on day 850 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 44 for 100. Bought on day 5 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 44 for 100. Bought on day 5 for 50. Profit = 100-50 = 50

```
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 970 for 100. Bought on day 943 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 165 for 100. Bought on day 158 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 165 for 100. Bought on day 158 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 989 for 100. Bought on day 934 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 96 for 100. Bought on day 66 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 96 for 100. Bought on day 66 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 972 for 100. Bought on day 963 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 97 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 97 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 931 for 100. Bought on day 906 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 223 for 100. Bought on day 210 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 223 for 100. Bought on day 210 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 966 for 100. Bought on day 959 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 163 for 100. Bought on day 112 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 163 for 100. Bought on day 112 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 973 for 100. Bought on day 889 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 58 for 100. Bought on day 33 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 58 for 100. Bought on day 33 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 980 for 100. Bought on day 877 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 231 for 100. Bought on day 55 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
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O(n): Sold on day 231 for 100. Bought on day 55 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 995 for 100. Bought on day 943 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 32 for 100. Bought on day 19 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 32 for 100. Bought on day 19 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 906 for 100. Bought on day 864 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 121 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 121 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 986 for 100. Bought on day 961 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 35 for 100. Bought on day 33 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 35 for 100. Bought on day 33 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 980 for 100. Bought on day 850 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 93 for 100. Bought on day 92 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 93 for 100. Bought on day 92 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 947 for 100. Bought on day 912 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 29 for 100. Bought on day 20 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 29 for 100. Bought on day 20 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 966 for 100. Bought on day 960 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 29 for 100. Bought on day 20 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 29 for 100. Bought on day 20 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 978 for 100. Bought on day 965 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 86 for 100. Bought on day 69 for 50. Profit = 100-50 = 50
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O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 86 for 100. Bought on day 69 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 911 for 100. Bought on day 883 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 117 for 100. Bought on day 116 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 117 for 100. Bought on day 116 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 985 for 100. Bought on day 970 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 63 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 63 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 978 for 100. Bought on day 878 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 222 for 100. Bought on day 171 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 222 for 100. Bought on day 171 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 970 for 100. Bought on day 913 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 235 for 100. Bought on day 198 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 235 for 100. Bought on day 198 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 864 for 100. Bought on day 758 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 15 for 100. Bought on day 5 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 15 for 100. Bought on day 5 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 921 for 100. Bought on day 895 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 39 for 100. Bought on day 37 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 39 for 100. Bought on day 37 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 966 for 100. Bought on day 965 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
```

```
O(n\log n): Sold on day 36 for 100. Bought on day 28 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 36 for 100. Bought on day 28 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 976 for 100. Bought on day 965 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 213 for 100. Bought on day 200 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 213 for 100. Bought on day 200 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 956 for 100. Bought on day 841 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 77 for 100. Bought on day 55 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 77 for 100. Bought on day 55 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 971 for 100. Bought on day 966 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 5 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 5 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 986 for 100. Bought on day 970 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 55 for 100. Bought on day 36 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 55 for 100. Bought on day 36 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 770 for 100. Bought on day 732 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 196 for 100. Bought on day 190 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 196 for 100. Bought on day 190 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 988 for 100. Bought on day 889 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 43 for 100. Bought on day 24 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 43 for 100. Bought on day 24 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 981 for 100. Bought on day 955 for 50. Profit = 100-50 = 50
```

```
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 47 for 100. Bought on day 28 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 47 for 100. Bought on day 28 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 996 for 100. Bought on day 981 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 119 for 100. Bought on day 101 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 119 for 100. Bought on day 101 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 969 for 100. Bought on day 902 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 72 for 100. Bought on day 12 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 72 for 100. Bought on day 12 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 974 for 100. Bought on day 958 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 31 for 100. Bought on day 23 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 31 for 100. Bought on day 23 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 927 for 100. Bought on day 869 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 102 for 100. Bought on day 14 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 102 for 100. Bought on day 14 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 997 for 100. Bought on day 902 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 9 for 100. Bought on day 5 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 9 for 100. Bought on day 5 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 980 for 100. Bought on day 911 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 149 for 100. Bought on day 140 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 149 for 100. Bought on day 140 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

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O(n^2): Sold on day 979 for 100. Bought on day 852 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 174 for 100. Bought on day 172 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 174 for 100. Bought on day 172 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 949 for 100. Bought on day 944 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 412 for 100. Bought on day 380 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 412 for 100. Bought on day 380 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 997 for 100. Bought on day 936 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 77 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 77 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 975 for 100. Bought on day 829 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 88 for 100. Bought on day 85 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 88 for 100. Bought on day 85 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 940 for 100. Bought on day 935 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 121 for 100. Bought on day 118 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 121 for 100. Bought on day 118 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 982 for 100. Bought on day 956 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 93 for 100. Bought on day 36 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 93 for 100. Bought on day 36 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 964 for 100. Bought on day 835 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 110 for 100. Bought on day 67 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 110 for 100. Bought on day 67 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
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--- Array length is 1000
O(n^2): Sold on day 999 for 100. Bought on day 986 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 114 for 100. Bought on day 105 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 114 for 100. Bought on day 105 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 982 for 100. Bought on day 782 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 182 for 100. Bought on day 157 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 182 for 100. Bought on day 157 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 939 for 100. Bought on day 807 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 12 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 12 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 979 for 100. Bought on day 933 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 59 for 100. Bought on day 15 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 59 for 100. Bought on day 15 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 861 for 100. Bought on day 778 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 108 for 100. Bought on day 98 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 108 for 100. Bought on day 98 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 728 for 100. Bought on day 707 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 49 for 100. Bought on day 32 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 49 for 100. Bought on day 32 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 918 for 100. Bought on day 896 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 220 for 100. Bought on day 168 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 220 for 100. Bought on day 168 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

--- Array length is 1000  $O(n^2)$ : Sold on day 917 for 100. Bought on day 907 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 42 for 100. Bought on day 35 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 42 for 100. Bought on day 35 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 890 for 100. Bought on day 860 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 78 for 100. Bought on day 76 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 78 for 100. Bought on day 76 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 942 for 100. Bought on day 807 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 57 for 100. Bought on day 47 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 57 for 100. Bought on day 47 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 . --- Array length is 1000  $O(n^2)$ : Sold on day 994 for 100. Bought on day 993 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 61 for 100. Bought on day 60 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 61 for 100. Bought on day 60 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 940 for 100. Bought on day 912 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 147 for 100. Bought on day 128 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 147 for 100. Bought on day 128 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 -------- Array length is 1000  $O(n^2)$ : Sold on day 975 for 100. Bought on day 880 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 234 for 100. Bought on day 226 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 234 for 100. Bought on day 226 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 989 for 100. Bought on day 984 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 101 for 100. Bought on day 34 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 101 for 100. Bought on day 34 for 50. Profit = 100-50 = 50

```
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 870 for 100. Bought on day 639 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 30 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 30 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 995 for 100. Bought on day 906 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 216 for 100. Bought on day 208 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 216 for 100. Bought on day 208 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 996 for 100. Bought on day 904 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 43 for 100. Bought on day 41 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 43 for 100. Bought on day 41 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 978 for 100. Bought on day 908 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 23 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 23 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 940 for 100. Bought on day 726 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 11 for 100. Bought on day 3 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 11 for 100. Bought on day 3 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 765 for 100. Bought on day 667 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 38 for 100. Bought on day 25 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 38 for 100. Bought on day 25 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 989 for 100. Bought on day 971 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 104 for 100. Bought on day 65 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
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O(n): Sold on day 104 for 100. Bought on day 65 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 994 for 100. Bought on day 931 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 104 for 100. Bought on day 95 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 104 for 100. Bought on day 95 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 939 for 100. Bought on day 909 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 112 for 100. Bought on day 79 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 112 for 100. Bought on day 79 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 940 for 100. Bought on day 915 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 122 for 100. Bought on day 71 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 122 for 100. Bought on day 71 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 941 for 100. Bought on day 938 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 170 for 100. Bought on day 125 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 170 for 100. Bought on day 125 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 974 for 100. Bought on day 932 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 249 for 100. Bought on day 124 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 249 for 100. Bought on day 124 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 990 for 100. Bought on day 899 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 233 for 100. Bought on day 199 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 233 for 100. Bought on day 199 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 964 for 100. Bought on day 849 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
```

O(nlogn): Sold on day 85 for 100. Bought on day 63 for 50. Profit = 100-50 = 50

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O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 85 for 100. Bought on day 63 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 996 for 100. Bought on day 981 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 23 for 100. Bought on day 12 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 23 for 100. Bought on day 12 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 920 for 100. Bought on day 885 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 140 for 100. Bought on day 138 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 140 for 100. Bought on day 138 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 996 for 100. Bought on day 877 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 354 for 100. Bought on day 278 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 354 for 100. Bought on day 278 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 940 for 100. Bought on day 885 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 91 for 100. Bought on day 71 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 91 for 100. Bought on day 71 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 974 for 100. Bought on day 942 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 118 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 118 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 947 for 100. Bought on day 923 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 46 for 100. Bought on day 1 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 46 for 100. Bought on day 1 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 967 for 100. Bought on day 884 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
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O(nlogn): Sold on day 156 for 100. Bought on day 134 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 156 for 100. Bought on day 134 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 999 for 100. Bought on day 943 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 88 for 100. Bought on day 70 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 88 for 100. Bought on day 70 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 983 for 100. Bought on day 932 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 93 for 100. Bought on day 76 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 93 for 100. Bought on day 76 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 983 for 100. Bought on day 950 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 52 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 52 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 976 for 100. Bought on day 975 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 26 for 100. Bought on day 6 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 26 for 100. Bought on day 6 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 984 for 100. Bought on day 929 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 98 for 100. Bought on day 41 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 98 for 100. Bought on day 41 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 977 for 100. Bought on day 976 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 71 for 100. Bought on day 68 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 71 for 100. Bought on day 68 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 951 for 100. Bought on day 926 for 50. Profit = 100-50 = 50
```

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O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 59 for 100. Bought on day 53 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 59 for 100. Bought on day 53 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 963 for 100. Bought on day 893 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 54 for 100. Bought on day 34 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 54 for 100. Bought on day 34 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 936 for 100. Bought on day 794 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 180 for 100. Bought on day 172 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 180 for 100. Bought on day 172 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 987 for 100. Bought on day 971 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 107 for 100. Bought on day 95 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 107 for 100. Bought on day 95 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 947 for 100. Bought on day 927 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 22 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 22 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 972 for 100. Bought on day 916 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 88 for 100. Bought on day 51 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 88 for 100. Bought on day 51 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 942 for 100. Bought on day 884 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 14 for 100. Bought on day 12 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 14 for 100. Bought on day 12 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

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O(n^2): Sold on day 944 for 100. Bought on day 794 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 185 for 100. Bought on day 174 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 185 for 100. Bought on day 174 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 949 for 100. Bought on day 730 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 58 for 100. Bought on day 23 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 58 for 100. Bought on day 23 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 957 for 100. Bought on day 953 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 104 for 100. Bought on day 74 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 104 for 100. Bought on day 74 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 970 for 100. Bought on day 861 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 22 for 100. Bought on day 16 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 22 for 100. Bought on day 16 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 980 for 100. Bought on day 932 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 208 for 100. Bought on day 144 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 208 for 100. Bought on day 144 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 953 for 100. Bought on day 949 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 247 for 100. Bought on day 246 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 247 for 100. Bought on day 246 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 937 for 100. Bought on day 905 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 65 for 100. Bought on day 37 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 65 for 100. Bought on day 37 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
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--- Array length is 1000
O(n^2): Sold on day 981 for 100. Bought on day 964 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 249 for 100. Bought on day 53 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 249 for 100. Bought on day 53 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 981 for 100. Bought on day 956 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 116 for 100. Bought on day 102 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 116 for 100. Bought on day 102 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 991 for 100. Bought on day 953 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 243 for 100. Bought on day 199 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 243 for 100. Bought on day 199 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 918 for 100. Bought on day 891 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 80 for 100. Bought on day 5 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 80 for 100. Bought on day 5 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 993 for 100. Bought on day 982 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 201 for 100. Bought on day 135 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 201 for 100. Bought on day 135 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 974 for 100. Bought on day 951 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 60 for 100. Bought on day 20 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 60 for 100. Bought on day 20 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 970 for 100. Bought on day 879 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 50 for 100. Bought on day 44 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 50 for 100. Bought on day 44 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

--- Array length is 1000  $O(n^2)$ : Sold on day 991 for 100. Bought on day 967 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 95 for 100. Bought on day 90 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 95 for 100. Bought on day 90 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 960 for 100. Bought on day 924 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 30 for 100. Bought on day 7 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 30 for 100. Bought on day 7 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 958 for 100. Bought on day 951 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 83 for 100. Bought on day 82 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 83 for 100. Bought on day 82 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 . --- Array length is 1000  $O(n^2)$ : Sold on day 989 for 100. Bought on day 986 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 30 for 100. Bought on day 10 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 30 for 100. Bought on day 10 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 999 for 100. Bought on day 978 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 149 for 100. Bought on day 148 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 149 for 100. Bought on day 148 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 -------- Array length is 1000  $O(n^2)$ : Sold on day 993 for 100. Bought on day 981 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 105 for 100. Bought on day 73 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 105 for 100. Bought on day 73 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 850 for 100. Bought on day 836 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 101 for 100. Bought on day 95 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 101 for 100. Bought on day 95 for 50. Profit = 100-50 = 50

```
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 972 for 100. Bought on day 954 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 57 for 100. Bought on day 20 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 57 for 100. Bought on day 20 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 887 for 100. Bought on day 860 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 135 for 100. Bought on day 131 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 135 for 100. Bought on day 131 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 983 for 100. Bought on day 919 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 45 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 45 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 957 for 100. Bought on day 873 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 163 for 100. Bought on day 148 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 163 for 100. Bought on day 148 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 807 for 100. Bought on day 806 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 12 for 100. Bought on day 6 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 12 for 100. Bought on day 6 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 907 for 100. Bought on day 846 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 35 for 100. Bought on day 23 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 35 for 100. Bought on day 23 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 972 for 100. Bought on day 905 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 185 for 100. Bought on day 47 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
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O(n): Sold on day 185 for 100. Bought on day 47 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 911 for 100. Bought on day 842 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 25 for 100. Bought on day 1 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 25 for 100. Bought on day 1 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 974 for 100. Bought on day 962 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 53 for 100. Bought on day 44 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 53 for 100. Bought on day 44 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 992 for 100. Bought on day 875 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 94 for 100. Bought on day 65 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 94 for 100. Bought on day 65 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 965 for 100. Bought on day 936 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 343 for 100. Bought on day 341 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 343 for 100. Bought on day 341 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 907 for 100. Bought on day 850 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 62 for 100. Bought on day 50 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 62 for 100. Bought on day 50 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 980 for 100. Bought on day 968 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 12 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 12 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 929 for 100. Bought on day 906 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 45 for 100. Bought on day 32 for 50. Profit = 100-50 = 50
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O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 45 for 100. Bought on day 32 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
· -----
--- Array length is 1000
O(n^2): Sold on day 924 for 100. Bought on day 854 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 81 for 100. Bought on day 60 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 81 for 100. Bought on day 60 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 953 for 100. Bought on day 741 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 120 for 100. Bought on day 61 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 120 for 100. Bought on day 61 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 968 for 100. Bought on day 950 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 20 for 100. Bought on day 14 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 20 for 100. Bought on day 14 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 920 for 100. Bought on day 901 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 28 for 100. Bought on day 24 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 28 for 100. Bought on day 24 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 986 for 100. Bought on day 982 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 44 for 100. Bought on day 22 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 44 for 100. Bought on day 22 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 843 for 100. Bought on day 689 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 65 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 65 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 959 for 100. Bought on day 823 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
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O(n\log n): Sold on day 22 for 100. Bought on day 18 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 22 for 100. Bought on day 18 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 976 for 100. Bought on day 971 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 74 for 100. Bought on day 71 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 74 for 100. Bought on day 71 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 924 for 100. Bought on day 914 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 109 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 109 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 931 for 100. Bought on day 927 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 47 for 100. Bought on day 45 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 47 for 100. Bought on day 45 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 983 for 100. Bought on day 952 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 57 for 100. Bought on day 32 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 57 for 100. Bought on day 32 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 936 for 100. Bought on day 882 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 44 for 100. Bought on day 25 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 44 for 100. Bought on day 25 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 980 for 100. Bought on day 914 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 10 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 10 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 991 for 100. Bought on day 923 for 50. Profit = 100-50 = 50
```

```
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 30 for 100. Bought on day 1 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 30 for 100. Bought on day 1 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 992 for 100. Bought on day 978 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 61 for 100. Bought on day 45 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 61 for 100. Bought on day 45 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 987 for 100. Bought on day 918 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 69 for 100. Bought on day 7 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 69 for 100. Bought on day 7 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 936 for 100. Bought on day 891 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 80 for 100. Bought on day 66 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 80 for 100. Bought on day 66 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 940 for 100. Bought on day 921 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 120 for 100. Bought on day 28 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 120 for 100. Bought on day 28 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 998 for 100. Bought on day 997 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 24 for 100. Bought on day 20 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 24 for 100. Bought on day 20 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 869 for 100. Bought on day 788 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 461 for 100. Bought on day 388 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 461 for 100. Bought on day 388 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

```
O(n^2): Sold on day 985 for 100. Bought on day 967 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 105 for 100. Bought on day 65 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 105 for 100. Bought on day 65 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 940 for 100. Bought on day 858 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 106 for 100. Bought on day 80 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 106 for 100. Bought on day 80 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 738 for 100. Bought on day 312 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 113 for 100. Bought on day 33 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 113 for 100. Bought on day 33 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 965 for 100. Bought on day 902 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 123 for 100. Bought on day 115 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 123 for 100. Bought on day 115 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 951 for 100. Bought on day 945 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 21 for 100. Bought on day 19 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 21 for 100. Bought on day 19 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 963 for 100. Bought on day 929 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 47 for 100. Bought on day 37 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 47 for 100. Bought on day 37 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 967 for 100. Bought on day 941 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 117 for 100. Bought on day 111 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 117 for 100. Bought on day 111 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
```

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--- Array length is 1000
O(n^2): Sold on day 993 for 100. Bought on day 924 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 240 for 100. Bought on day 216 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 240 for 100. Bought on day 216 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 874 for 100. Bought on day 766 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 90 for 100. Bought on day 12 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 90 for 100. Bought on day 12 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 930 for 100. Bought on day 817 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 42 for 100. Bought on day 6 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 42 for 100. Bought on day 6 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 980 for 100. Bought on day 807 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 78 for 100. Bought on day 76 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 78 for 100. Bought on day 76 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 971 for 100. Bought on day 950 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 146 for 100. Bought on day 136 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 146 for 100. Bought on day 136 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 985 for 100. Bought on day 968 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 122 for 100. Bought on day 89 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 122 for 100. Bought on day 89 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 894 for 100. Bought on day 875 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 156 for 100. Bought on day 145 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 156 for 100. Bought on day 145 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

--- Array length is 1000  $O(n^2)$ : Sold on day 975 for 100. Bought on day 839 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 46 for 100. Bought on day 32 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 46 for 100. Bought on day 32 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 948 for 100. Bought on day 786 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 87 for 100. Bought on day 81 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 87 for 100. Bought on day 81 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 969 for 100. Bought on day 908 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 190 for 100. Bought on day 121 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 190 for 100. Bought on day 121 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 . --- Array length is 1000  $O(n^2)$ : Sold on day 983 for 100. Bought on day 982 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 130 for 100. Bought on day 126 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511O(n): Sold on day 130 for 100. Bought on day 126 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 982 for 100. Bought on day 940 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 130 for 100. Bought on day 72 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 130 for 100. Bought on day 72 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 -------- Array length is 1000  $O(n^2)$ : Sold on day 984 for 100. Bought on day 983 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 91 for 100. Bought on day 45 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 91 for 100. Bought on day 45 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 787 for 100. Bought on day 757 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 36 for 100. Bought on day 34 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 36 for 100. Bought on day 34 for 50. Profit = 100-50 = 50

```
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 972 for 100. Bought on day 915 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 111 for 100. Bought on day 100 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 111 for 100. Bought on day 100 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 996 for 100. Bought on day 959 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 275 for 100. Bought on day 252 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 275 for 100. Bought on day 252 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 903 for 100. Bought on day 898 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 56 for 100. Bought on day 49 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 56 for 100. Bought on day 49 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 983 for 100. Bought on day 917 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 97 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 97 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 975 for 100. Bought on day 905 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 233 for 100. Bought on day 197 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 233 for 100. Bought on day 197 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 980 for 100. Bought on day 967 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 88 for 100. Bought on day 78 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 88 for 100. Bought on day 78 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 905 for 100. Bought on day 717 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 186 for 100. Bought on day 178 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
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O(n): Sold on day 186 for 100. Bought on day 178 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 925 for 100. Bought on day 821 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 178 for 100. Bought on day 175 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 178 for 100. Bought on day 175 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 994 for 100. Bought on day 961 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 30 for 100. Bought on day 18 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 30 for 100. Bought on day 18 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 964 for 100. Bought on day 854 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 60 for 100. Bought on day 42 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 60 for 100. Bought on day 42 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 940 for 100. Bought on day 902 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 217 for 100. Bought on day 48 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 217 for 100. Bought on day 48 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 919 for 100. Bought on day 844 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 25 for 100. Bought on day 15 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 25 for 100. Bought on day 15 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 993 for 100. Bought on day 906 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 202 for 100. Bought on day 12 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 202 for 100. Bought on day 12 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 996 for 100. Bought on day 976 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
```

O(nlogn): Sold on day 60 for 100. Bought on day 48 for 50. Profit = 100-50 = 50

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O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 60 for 100. Bought on day 48 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
· -----
--- Array length is 1000
O(n^2): Sold on day 974 for 100. Bought on day 824 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 31 for 100. Bought on day 28 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 31 for 100. Bought on day 28 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 826 for 100. Bought on day 813 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 56 for 100. Bought on day 45 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 56 for 100. Bought on day 45 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 952 for 100. Bought on day 925 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 86 for 100. Bought on day 33 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 86 for 100. Bought on day 33 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 975 for 100. Bought on day 952 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 77 for 100. Bought on day 51 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 77 for 100. Bought on day 51 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 795 for 100. Bought on day 780 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 110 for 100. Bought on day 80 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 110 for 100. Bought on day 80 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 998 for 100. Bought on day 991 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 158 for 100. Bought on day 26 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 158 for 100. Bought on day 26 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 942 for 100. Bought on day 921 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
```

```
O(n\log n): Sold on day 20 for 100. Bought on day 17 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 20 for 100. Bought on day 17 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 888 for 100. Bought on day 873 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 66 for 100. Bought on day 60 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 66 for 100. Bought on day 60 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 913 for 100. Bought on day 900 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 32 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 32 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 951 for 100. Bought on day 938 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 81 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 81 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 971 for 100. Bought on day 939 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 51 for 100. Bought on day 45 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 51 for 100. Bought on day 45 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 774 for 100. Bought on day 500 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 269 for 100. Bought on day 266 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 269 for 100. Bought on day 266 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 970 for 100. Bought on day 886 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 50 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 50 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 897 for 100. Bought on day 807 for 50. Profit = 100-50 = 50
```

```
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 232 for 100. Bought on day 202 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 232 for 100. Bought on day 202 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 847 for 100. Bought on day 846 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 116 for 100. Bought on day 71 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 116 for 100. Bought on day 71 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 993 for 100. Bought on day 973 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 156 for 100. Bought on day 138 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 156 for 100. Bought on day 138 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 840 for 100. Bought on day 736 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 34 for 100. Bought on day 25 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 34 for 100. Bought on day 25 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 919 for 100. Bought on day 901 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 103 for 100. Bought on day 95 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 103 for 100. Bought on day 95 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 961 for 100. Bought on day 818 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 199 for 100. Bought on day 16 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 199 for 100. Bought on day 16 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 992 for 100. Bought on day 907 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 55 for 100. Bought on day 12 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 55 for 100. Bought on day 12 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

```
O(n^2): Sold on day 960 for 100. Bought on day 956 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 187 for 100. Bought on day 175 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 187 for 100. Bought on day 175 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 870 for 100. Bought on day 832 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 45 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 45 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 969 for 100. Bought on day 878 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 30 for 100. Bought on day 28 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 30 for 100. Bought on day 28 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 863 for 100. Bought on day 856 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 48 for 100. Bought on day 27 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 48 for 100. Bought on day 27 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 962 for 100. Bought on day 909 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 8 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 8 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 958 for 100. Bought on day 934 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 71 for 100. Bought on day 66 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 71 for 100. Bought on day 66 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 989 for 100. Bought on day 986 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 51 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 51 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

```
--- Array length is 1000
O(n^2): Sold on day 983 for 100. Bought on day 981 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 86 for 100. Bought on day 74 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 86 for 100. Bought on day 74 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 883 for 100. Bought on day 663 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 110 for 100. Bought on day 74 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 110 for 100. Bought on day 74 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 810 for 100. Bought on day 798 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 128 for 100. Bought on day 46 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 128 for 100. Bought on day 46 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 924 for 100. Bought on day 887 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 216 for 100. Bought on day 157 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 216 for 100. Bought on day 157 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 939 for 100. Bought on day 923 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 43 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 43 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 973 for 100. Bought on day 950 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 84 for 100. Bought on day 77 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 84 for 100. Bought on day 77 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 994 for 100. Bought on day 834 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 9 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 9 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

--- Array length is 1000  $O(n^2)$ : Sold on day 926 for 100. Bought on day 917 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 129 for 100. Bought on day 85 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511O(n): Sold on day 129 for 100. Bought on day 85 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 896 for 100. Bought on day 871 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 48 for 100. Bought on day 17 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 48 for 100. Bought on day 17 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 841 for 100. Bought on day 836 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 61 for 100. Bought on day 55 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 61 for 100. Bought on day 55 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 . --- Array length is 1000  $O(n^2)$ : Sold on day 997 for 100. Bought on day 858 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 231 for 100. Bought on day 221 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 231 for 100. Bought on day 221 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 \_\_\_\_\_ --- Array length is 1000  $O(n^2)$ : Sold on day 995 for 100. Bought on day 737 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 230 for 100. Bought on day 213 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 230 for 100. Bought on day 213 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 -------- Array length is 1000  $O(n^2)$ : Sold on day 975 for 100. Bought on day 869 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 213 for 100. Bought on day 203 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 213 for 100. Bought on day 203 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 902 for 100. Bought on day 889 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 146 for 100. Bought on day 143 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 146 for 100. Bought on day 143 for 50. Profit = 100-50 = 50

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numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 971 for 100. Bought on day 932 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 122 for 100. Bought on day 78 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 122 for 100. Bought on day 78 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 999 for 100. Bought on day 926 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 239 for 100. Bought on day 215 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 239 for 100. Bought on day 215 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 990 for 100. Bought on day 933 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 23 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 23 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 972 for 100. Bought on day 936 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 118 for 100. Bought on day 103 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 118 for 100. Bought on day 103 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 970 for 100. Bought on day 944 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 28 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 28 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 986 for 100. Bought on day 937 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 186 for 100. Bought on day 174 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 186 for 100. Bought on day 174 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 949 for 100. Bought on day 908 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 23 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
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O(n): Sold on day 23 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 991 for 100. Bought on day 934 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 58 for 100. Bought on day 7 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 58 for 100. Bought on day 7 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 976 for 100. Bought on day 967 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 48 for 100. Bought on day 6 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 48 for 100. Bought on day 6 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 982 for 100. Bought on day 943 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 47 for 100. Bought on day 16 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 47 for 100. Bought on day 16 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 966 for 100. Bought on day 806 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 86 for 100. Bought on day 15 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 86 for 100. Bought on day 15 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 973 for 100. Bought on day 964 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 198 for 100. Bought on day 109 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 198 for 100. Bought on day 109 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 983 for 100. Bought on day 966 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 299 for 100. Bought on day 290 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 299 for 100. Bought on day 290 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 979 for 100. Bought on day 963 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 216 for 100. Bought on day 158 for 50. Profit = 100-50 = 50
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O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 216 for 100. Bought on day 158 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 913 for 100. Bought on day 759 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 17 for 100. Bought on day 9 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 17 for 100. Bought on day 9 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 953 for 100. Bought on day 868 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 291 for 100. Bought on day 286 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 291 for 100. Bought on day 286 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 945 for 100. Bought on day 888 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 62 for 100. Bought on day 36 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 62 for 100. Bought on day 36 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 788 for 100. Bought on day 774 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 55 for 100. Bought on day 51 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 55 for 100. Bought on day 51 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 963 for 100. Bought on day 893 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 77 for 100. Bought on day 63 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 \text{ numDivide} = 511 \text{ numConquer} = 511
O(n): Sold on day 77 for 100. Bought on day 63 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 999 for 100. Bought on day 887 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 28 for 100. Bought on day 22 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 28 for 100. Bought on day 22 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 978 for 100. Bought on day 903 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
```

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O(nlogn): Sold on day 101 for 100. Bought on day 65 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 101 for 100. Bought on day 65 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 960 for 100. Bought on day 934 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 47 for 100. Bought on day 9 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 47 for 100. Bought on day 9 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 921 for 100. Bought on day 918 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 86 for 100. Bought on day 47 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 86 for 100. Bought on day 47 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 965 for 100. Bought on day 963 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 55 for 100. Bought on day 53 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 55 for 100. Bought on day 53 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 933 for 100. Bought on day 874 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 148 for 100. Bought on day 143 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 148 for 100. Bought on day 143 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 891 for 100. Bought on day 832 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 79 for 100. Bought on day 44 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 79 for 100. Bought on day 44 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 984 for 100. Bought on day 968 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 45 for 100. Bought on day 34 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 45 for 100. Bought on day 34 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 992 for 100. Bought on day 988 for 50. Profit = 100-50 = 50
```

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O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 105 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 105 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 990 for 100. Bought on day 844 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 155 for 100. Bought on day 129 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 155 for 100. Bought on day 129 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 999 for 100. Bought on day 989 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 155 for 100. Bought on day 136 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 155 for 100. Bought on day 136 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 964 for 100. Bought on day 901 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 112 for 100. Bought on day 110 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 112 for 100. Bought on day 110 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 988 for 100. Bought on day 976 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 208 for 100. Bought on day 146 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 208 for 100. Bought on day 146 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 996 for 100. Bought on day 970 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 21 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 21 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 908 for 100. Bought on day 904 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 16 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 16 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

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O(n^2): Sold on day 928 for 100. Bought on day 924 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 242 for 100. Bought on day 133 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 242 for 100. Bought on day 133 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 965 for 100. Bought on day 958 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 6 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 6 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 970 for 100. Bought on day 914 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 102 for 100. Bought on day 75 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 102 for 100. Bought on day 75 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 915 for 100. Bought on day 912 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 140 for 100. Bought on day 137 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 140 for 100. Bought on day 137 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 979 for 100. Bought on day 952 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 29 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 29 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 993 for 100. Bought on day 947 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 55 for 100. Bought on day 48 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 55 for 100. Bought on day 48 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 994 for 100. Bought on day 946 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 228 for 100. Bought on day 214 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 228 for 100. Bought on day 214 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

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--- Array length is 1000
O(n^2): Sold on day 990 for 100. Bought on day 953 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 169 for 100. Bought on day 78 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 169 for 100. Bought on day 78 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 963 for 100. Bought on day 960 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 240 for 100. Bought on day 225 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 240 for 100. Bought on day 225 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 978 for 100. Bought on day 969 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 79 for 100. Bought on day 63 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 79 for 100. Bought on day 63 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 984 for 100. Bought on day 807 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 50 for 100. Bought on day 31 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 50 for 100. Bought on day 31 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 812 for 100. Bought on day 654 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 44 for 100. Bought on day 40 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 44 for 100. Bought on day 40 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 986 for 100. Bought on day 953 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 122 for 100. Bought on day 79 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 122 for 100. Bought on day 79 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 917 for 100. Bought on day 905 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 16 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 16 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

--- Array length is 1000  $O(n^2)$ : Sold on day 979 for 100. Bought on day 971 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 37 for 100. Bought on day 7 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 37 for 100. Bought on day 7 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 855 for 100. Bought on day 840 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 10 for 100. Bought on day 3 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 10 for 100. Bought on day 3 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 941 for 100. Bought on day 935 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 60 for 100. Bought on day 47 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 60 for 100. Bought on day 47 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 . --- Array length is 1000  $O(n^2)$ : Sold on day 898 for 100. Bought on day 860 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 431 for 100. Bought on day 408 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 431 for 100. Bought on day 408 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 990 for 100. Bought on day 850 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 27 for 100. Bought on day 11 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 27 for 100. Bought on day 11 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 -------- Array length is 1000  $O(n^2)$ : Sold on day 989 for 100. Bought on day 965 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 27 for 100. Bought on day 23 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 27 for 100. Bought on day 23 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 963 for 100. Bought on day 898 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 55 for 100. Bought on day 6 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 55 for 100. Bought on day 6 for 50. Profit = 100-50 = 50

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numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 960 for 100. Bought on day 889 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 50 for 100. Bought on day 23 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 50 for 100. Bought on day 23 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 989 for 100. Bought on day 870 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 29 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 29 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 979 for 100. Bought on day 913 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 177 for 100. Bought on day 141 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 177 for 100. Bought on day 141 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 964 for 100. Bought on day 901 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 60 for 100. Bought on day 28 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 60 for 100. Bought on day 28 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 988 for 100. Bought on day 968 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 54 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 54 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 983 for 100. Bought on day 829 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 122 for 100. Bought on day 114 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 122 for 100. Bought on day 114 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 971 for 100. Bought on day 945 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 114 for 100. Bought on day 63 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
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O(n): Sold on day 114 for 100. Bought on day 63 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 993 for 100. Bought on day 970 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 6 for 100. Bought on day 3 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 6 for 100. Bought on day 3 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 991 for 100. Bought on day 965 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 57 for 100. Bought on day 56 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 57 for 100. Bought on day 56 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 955 for 100. Bought on day 937 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 106 for 100. Bought on day 19 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 106 for 100. Bought on day 19 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 985 for 100. Bought on day 920 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 120 for 100. Bought on day 95 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 120 for 100. Bought on day 95 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 983 for 100. Bought on day 976 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 104 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 104 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 961 for 100. Bought on day 953 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 17 for 100. Bought on day 15 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 17 for 100. Bought on day 15 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 973 for 100. Bought on day 916 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 180 for 100. Bought on day 148 for 50. Profit = 100-50 = 50
```

```
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 180 for 100. Bought on day 148 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
· -----
--- Array length is 1000
O(n^2): Sold on day 985 for 100. Bought on day 968 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 57 for 100. Bought on day 18 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 57 for 100. Bought on day 18 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 970 for 100. Bought on day 953 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 112 for 100. Bought on day 96 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 112 for 100. Bought on day 96 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 922 for 100. Bought on day 852 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 171 for 100. Bought on day 47 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 171 for 100. Bought on day 47 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 953 for 100. Bought on day 913 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 20 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 20 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 909 for 100. Bought on day 884 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 133 for 100. Bought on day 126 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 133 for 100. Bought on day 126 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 822 for 100. Bought on day 802 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 231 for 100. Bought on day 79 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 231 for 100. Bought on day 79 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 935 for 100. Bought on day 881 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
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O(n\log n): Sold on day 28 for 100. Bought on day 12 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 28 for 100. Bought on day 12 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 997 for 100. Bought on day 996 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 336 for 100. Bought on day 314 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 336 for 100. Bought on day 314 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 942 for 100. Bought on day 877 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 75 for 100. Bought on day 73 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 75 for 100. Bought on day 73 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 970 for 100. Bought on day 865 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 235 for 100. Bought on day 141 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 235 for 100. Bought on day 141 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 996 for 100. Bought on day 965 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 150 for 100. Bought on day 137 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 150 for 100. Bought on day 137 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 986 for 100. Bought on day 980 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 28 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 28 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 981 for 100. Bought on day 963 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 31 for 100. Bought on day 14 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 31 for 100. Bought on day 14 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 999 for 100. Bought on day 774 for 50. Profit = 100-50 = 50
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O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 92 for 100. Bought on day 87 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 92 for 100. Bought on day 87 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 998 for 100. Bought on day 986 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 195 for 100. Bought on day 190 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 195 for 100. Bought on day 190 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 929 for 100. Bought on day 928 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 17 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 17 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 983 for 100. Bought on day 972 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 116 for 100. Bought on day 42 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 116 for 100. Bought on day 42 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 932 for 100. Bought on day 833 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 185 for 100. Bought on day 173 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 185 for 100. Bought on day 173 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 868 for 100. Bought on day 815 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 106 for 100. Bought on day 102 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 106 for 100. Bought on day 102 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 944 for 100. Bought on day 930 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 144 for 100. Bought on day 141 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 144 for 100. Bought on day 141 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

```
O(n^2): Sold on day 991 for 100. Bought on day 979 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 24 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 24 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 960 for 100. Bought on day 944 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 117 for 100. Bought on day 110 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 117 for 100. Bought on day 110 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 992 for 100. Bought on day 986 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 88 for 100. Bought on day 63 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 88 for 100. Bought on day 63 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 956 for 100. Bought on day 955 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 124 for 100. Bought on day 53 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 124 for 100. Bought on day 53 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 984 for 100. Bought on day 946 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 189 for 100. Bought on day 60 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 189 for 100. Bought on day 60 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 950 for 100. Bought on day 870 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 93 for 100. Bought on day 63 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 93 for 100. Bought on day 63 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 963 for 100. Bought on day 927 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 62 for 100. Bought on day 49 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 62 for 100. Bought on day 49 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

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--- Array length is 1000
O(n^2): Sold on day 979 for 100. Bought on day 956 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 55 for 100. Bought on day 52 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 55 for 100. Bought on day 52 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 896 for 100. Bought on day 823 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 23 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 23 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 994 for 100. Bought on day 808 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 111 for 100. Bought on day 30 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 111 for 100. Bought on day 30 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 993 for 100. Bought on day 949 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 139 for 100. Bought on day 134 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 139 for 100. Bought on day 134 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 970 for 100. Bought on day 909 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 84 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 84 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 945 for 100. Bought on day 898 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 54 for 100. Bought on day 18 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 54 for 100. Bought on day 18 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 896 for 100. Bought on day 873 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 32 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 32 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

--- Array length is 1000  $O(n^2)$ : Sold on day 988 for 100. Bought on day 899 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 33 for 100. Bought on day 24 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 33 for 100. Bought on day 24 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 963 for 100. Bought on day 957 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 46 for 100. Bought on day 32 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 46 for 100. Bought on day 32 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 991 for 100. Bought on day 982 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 120 for 100. Bought on day 24 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 120 for 100. Bought on day 24 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 . --- Array length is 1000  $O(n^2)$ : Sold on day 955 for 100. Bought on day 925 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 113 for 100. Bought on day 92 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 113 for 100. Bought on day 92 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 960 for 100. Bought on day 926 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 105 for 100. Bought on day 98 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 105 for 100. Bought on day 98 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 -------- Array length is 1000  $O(n^2)$ : Sold on day 938 for 100. Bought on day 823 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 225 for 100. Bought on day 221 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 225 for 100. Bought on day 221 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 940 for 100. Bought on day 897 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 44 for 100. Bought on day 32 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 44 for 100. Bought on day 32 for 50. Profit = 100-50 = 50

```
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 931 for 100. Bought on day 887 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 7 for 100. Bought on day 3 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 7 for 100. Bought on day 3 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 955 for 100. Bought on day 809 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 60 for 100. Bought on day 31 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 60 for 100. Bought on day 31 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 916 for 100. Bought on day 864 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 87 for 100. Bought on day 48 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 87 for 100. Bought on day 48 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 983 for 100. Bought on day 975 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 155 for 100. Bought on day 149 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 155 for 100. Bought on day 149 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 930 for 100. Bought on day 879 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 18 for 100. Bought on day 3 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 18 for 100. Bought on day 3 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 848 for 100. Bought on day 826 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 56 for 100. Bought on day 41 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 56 for 100. Bought on day 41 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 972 for 100. Bought on day 935 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 27 for 100. Bought on day 20 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
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O(n): Sold on day 27 for 100. Bought on day 20 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 883 for 100. Bought on day 759 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 35 for 100. Bought on day 34 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 35 for 100. Bought on day 34 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 949 for 100. Bought on day 785 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 60 for 100. Bought on day 43 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 60 for 100. Bought on day 43 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 891 for 100. Bought on day 850 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 87 for 100. Bought on day 72 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 87 for 100. Bought on day 72 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 993 for 100. Bought on day 991 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 42 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 42 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 903 for 100. Bought on day 892 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 176 for 100. Bought on day 149 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 176 for 100. Bought on day 149 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 849 for 100. Bought on day 844 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 112 for 100. Bought on day 95 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 112 for 100. Bought on day 95 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 924 for 100. Bought on day 920 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 14 for 100. Bought on day 5 for 50. Profit = 100-50 = 50
```

```
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 14 for 100. Bought on day 5 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
· -----
--- Array length is 1000
O(n^2): Sold on day 940 for 100. Bought on day 837 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 59 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 59 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 953 for 100. Bought on day 918 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 178 for 100. Bought on day 173 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 178 for 100. Bought on day 173 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 948 for 100. Bought on day 917 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 112 for 100. Bought on day 97 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 112 for 100. Bought on day 97 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 950 for 100. Bought on day 893 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 107 for 100. Bought on day 87 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 107 for 100. Bought on day 87 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 893 for 100. Bought on day 747 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 54 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 54 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 919 for 100. Bought on day 847 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 412 for 100. Bought on day 382 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 412 for 100. Bought on day 382 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 936 for 100. Bought on day 895 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
```

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O(nlogn): Sold on day 174 for 100. Bought on day 172 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 174 for 100. Bought on day 172 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 894 for 100. Bought on day 709 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 11 for 100. Bought on day 6 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 11 for 100. Bought on day 6 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 973 for 100. Bought on day 922 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 233 for 100. Bought on day 197 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 233 for 100. Bought on day 197 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 972 for 100. Bought on day 890 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 57 for 100. Bought on day 7 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 57 for 100. Bought on day 7 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 980 for 100. Bought on day 950 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 13 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 13 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 955 for 100. Bought on day 743 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 181 for 100. Bought on day 136 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 181 for 100. Bought on day 136 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 857 for 100. Bought on day 772 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 364 for 100. Bought on day 328 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 364 for 100. Bought on day 328 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 971 for 100. Bought on day 837 for 50. Profit = 100-50 = 50
```

```
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 104 for 100. Bought on day 97 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 104 for 100. Bought on day 97 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 991 for 100. Bought on day 990 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 180 for 100. Bought on day 175 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 180 for 100. Bought on day 175 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 983 for 100. Bought on day 947 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 42 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 42 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 819 for 100. Bought on day 690 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 266 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 266 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 992 for 100. Bought on day 984 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 59 for 100. Bought on day 46 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 59 for 100. Bought on day 46 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 999 for 100. Bought on day 988 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 122 for 100. Bought on day 37 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 122 for 100. Bought on day 37 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 986 for 100. Bought on day 920 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 199 for 100. Bought on day 190 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 199 for 100. Bought on day 190 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

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O(n^2): Sold on day 971 for 100. Bought on day 892 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 208 for 100. Bought on day 161 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 208 for 100. Bought on day 161 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 955 for 100. Bought on day 938 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 46 for 100. Bought on day 19 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 46 for 100. Bought on day 19 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 837 for 100. Bought on day 814 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 218 for 100. Bought on day 203 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 218 for 100. Bought on day 203 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 985 for 100. Bought on day 939 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 97 for 100. Bought on day 6 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 97 for 100. Bought on day 6 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 917 for 100. Bought on day 787 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 79 for 100. Bought on day 69 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 79 for 100. Bought on day 69 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 922 for 100. Bought on day 822 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 29 for 100. Bought on day 1 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 29 for 100. Bought on day 1 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 808 for 100. Bought on day 785 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 43 for 100. Bought on day 34 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 43 for 100. Bought on day 34 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

```
--- Array length is 1000
O(n^2): Sold on day 999 for 100. Bought on day 768 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 45 for 100. Bought on day 24 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 45 for 100. Bought on day 24 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 986 for 100. Bought on day 909 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 57 for 100. Bought on day 53 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 57 for 100. Bought on day 53 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 980 for 100. Bought on day 979 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 47 for 100. Bought on day 30 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 47 for 100. Bought on day 30 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 970 for 100. Bought on day 886 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 26 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 26 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 985 for 100. Bought on day 979 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 162 for 100. Bought on day 105 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 162 for 100. Bought on day 105 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 979 for 100. Bought on day 955 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 49 for 100. Bought on day 18 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 49 for 100. Bought on day 18 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 980 for 100. Bought on day 937 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 82 for 100. Bought on day 54 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 82 for 100. Bought on day 54 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

--- Array length is 1000  $O(n^2)$ : Sold on day 911 for 100. Bought on day 895 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 120 for 100. Bought on day 93 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 120 for 100. Bought on day 93 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 967 for 100. Bought on day 900 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 557 for 100. Bought on day 541 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 557 for 100. Bought on day 541 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 963 for 100. Bought on day 957 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 46 for 100. Bought on day 43 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 46 for 100. Bought on day 43 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 . --- Array length is 1000  $O(n^2)$ : Sold on day 962 for 100. Bought on day 946 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 52 for 100. Bought on day 43 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 52 for 100. Bought on day 43 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 972 for 100. Bought on day 971 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 55 for 100. Bought on day 6 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 55 for 100. Bought on day 6 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 -------- Array length is 1000  $O(n^2)$ : Sold on day 985 for 100. Bought on day 961 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 121 for 100. Bought on day 16 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 121 for 100. Bought on day 16 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 934 for 100. Bought on day 933 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 113 for 100. Bought on day 19 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 113 for 100. Bought on day 19 for 50. Profit = 100-50 = 50

```
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 868 for 100. Bought on day 812 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 67 for 100. Bought on day 66 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 67 for 100. Bought on day 66 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 962 for 100. Bought on day 931 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 117 for 100. Bought on day 87 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 117 for 100. Bought on day 87 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 868 for 100. Bought on day 798 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 13 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 13 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 978 for 100. Bought on day 898 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 140 for 100. Bought on day 139 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 140 for 100. Bought on day 139 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 992 for 100. Bought on day 852 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 107 for 100. Bought on day 71 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 107 for 100. Bought on day 71 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 899 for 100. Bought on day 851 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 18 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 18 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 846 for 100. Bought on day 732 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 59 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
```

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O(n): Sold on day 59 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 840 for 100. Bought on day 788 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 47 for 100. Bought on day 37 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 47 for 100. Bought on day 37 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 721 for 100. Bought on day 715 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 178 for 100. Bought on day 176 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 178 for 100. Bought on day 176 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 978 for 100. Bought on day 951 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 48 for 100. Bought on day 29 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 48 for 100. Bought on day 29 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 975 for 100. Bought on day 954 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 146 for 100. Bought on day 139 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 146 for 100. Bought on day 139 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 891 for 100. Bought on day 791 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 9 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 9 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 950 for 100. Bought on day 827 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 179 for 100. Bought on day 127 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 179 for 100. Bought on day 127 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 910 for 100. Bought on day 821 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
```

O(nlogn): Sold on day 296 for 100. Bought on day 287 for 50. Profit = 100-50 = 50

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O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 296 for 100. Bought on day 287 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 998 for 100. Bought on day 788 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 244 for 100. Bought on day 243 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 244 for 100. Bought on day 243 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 987 for 100. Bought on day 932 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 237 for 100. Bought on day 158 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 237 for 100. Bought on day 158 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 975 for 100. Bought on day 889 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 102 for 100. Bought on day 100 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 102 for 100. Bought on day 100 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 825 for 100. Bought on day 773 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 41 for 100. Bought on day 26 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 41 for 100. Bought on day 26 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 996 for 100. Bought on day 855 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 213 for 100. Bought on day 131 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 213 for 100. Bought on day 131 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 860 for 100. Bought on day 840 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 3 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 3 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 924 for 100. Bought on day 805 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
```

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O(nlogn): Sold on day 120 for 100. Bought on day 115 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 120 for 100. Bought on day 115 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 995 for 100. Bought on day 967 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 337 for 100. Bought on day 334 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 337 for 100. Bought on day 334 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 860 for 100. Bought on day 810 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 153 for 100. Bought on day 134 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 153 for 100. Bought on day 134 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 969 for 100. Bought on day 942 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 198 for 100. Bought on day 192 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 198 for 100. Bought on day 192 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 970 for 100. Bought on day 939 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 47 for 100. Bought on day 1 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 47 for 100. Bought on day 1 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 858 for 100. Bought on day 838 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 231 for 100. Bought on day 195 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 231 for 100. Bought on day 195 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 981 for 100. Bought on day 971 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 160 for 100. Bought on day 87 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 160 for 100. Bought on day 87 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 972 for 100. Bought on day 961 for 50. Profit = 100-50 = 50
```

```
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 107 for 100. Bought on day 80 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 107 for 100. Bought on day 80 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 993 for 100. Bought on day 919 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 203 for 100. Bought on day 95 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 203 for 100. Bought on day 95 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 929 for 100. Bought on day 861 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 156 for 100. Bought on day 148 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 156 for 100. Bought on day 148 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 993 for 100. Bought on day 971 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 187 for 100. Bought on day 138 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 187 for 100. Bought on day 138 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 974 for 100. Bought on day 955 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 208 for 100. Bought on day 198 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 208 for 100. Bought on day 198 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 997 for 100. Bought on day 943 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 109 for 100. Bought on day 98 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 109 for 100. Bought on day 98 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 981 for 100. Bought on day 979 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 56 for 100. Bought on day 3 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 56 for 100. Bought on day 3 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

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O(n^2): Sold on day 862 for 100. Bought on day 857 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 206 for 100. Bought on day 198 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 206 for 100. Bought on day 198 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 972 for 100. Bought on day 879 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 113 for 100. Bought on day 112 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 113 for 100. Bought on day 112 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 998 for 100. Bought on day 972 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 247 for 100. Bought on day 97 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 247 for 100. Bought on day 97 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 964 for 100. Bought on day 869 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 38 for 100. Bought on day 18 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 38 for 100. Bought on day 18 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 801 for 100. Bought on day 681 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 114 for 100. Bought on day 95 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 114 for 100. Bought on day 95 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 983 for 100. Bought on day 941 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 85 for 100. Bought on day 3 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 85 for 100. Bought on day 3 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 973 for 100. Bought on day 837 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 11 for 100. Bought on day 3 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 11 for 100. Bought on day 3 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
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--- Array length is 1000
O(n^2): Sold on day 997 for 100. Bought on day 951 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 93 for 100. Bought on day 82 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 93 for 100. Bought on day 82 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 987 for 100. Bought on day 903 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 122 for 100. Bought on day 110 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 122 for 100. Bought on day 110 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 986 for 100. Bought on day 937 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 102 for 100. Bought on day 24 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 102 for 100. Bought on day 24 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 939 for 100. Bought on day 910 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 113 for 100. Bought on day 42 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 113 for 100. Bought on day 42 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 999 for 100. Bought on day 879 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 56 for 100. Bought on day 44 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 56 for 100. Bought on day 44 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 965 for 100. Bought on day 935 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 69 for 100. Bought on day 67 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 69 for 100. Bought on day 67 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 946 for 100. Bought on day 830 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 30 for 100. Bought on day 22 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 30 for 100. Bought on day 22 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

--- Array length is 1000  $O(n^2)$ : Sold on day 954 for 100. Bought on day 930 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 168 for 100. Bought on day 132 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511O(n): Sold on day 168 for 100. Bought on day 132 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 989 for 100. Bought on day 951 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 66 for 100. Bought on day 11 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 66 for 100. Bought on day 11 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 951 for 100. Bought on day 863 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 19 for 100. Bought on day 6 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 19 for 100. Bought on day 6 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 . --- Array length is 1000  $O(n^2)$ : Sold on day 859 for 100. Bought on day 830 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 225 for 100. Bought on day 222 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 225 for 100. Bought on day 222 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 963 for 100. Bought on day 929 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 21 for 100. Bought on day 15 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 21 for 100. Bought on day 15 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 -------- Array length is 1000  $O(n^2)$ : Sold on day 952 for 100. Bought on day 937 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 148 for 100. Bought on day 70 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 148 for 100. Bought on day 70 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 913 for 100. Bought on day 895 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 46 for 100. Bought on day 19 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 46 for 100. Bought on day 19 for 50. Profit = 100-50 = 50

```
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 964 for 100. Bought on day 936 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 548 for 100. Bought on day 510 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 548 for 100. Bought on day 510 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 879 for 100. Bought on day 780 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 45 for 100. Bought on day 18 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 45 for 100. Bought on day 18 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 996 for 100. Bought on day 915 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 107 for 100. Bought on day 70 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 107 for 100. Bought on day 70 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 998 for 100. Bought on day 985 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 59 for 100. Bought on day 26 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 59 for 100. Bought on day 26 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 985 for 100. Bought on day 977 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 118 for 100. Bought on day 73 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 118 for 100. Bought on day 73 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 996 for 100. Bought on day 826 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 86 for 100. Bought on day 39 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 86 for 100. Bought on day 39 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 893 for 100. Bought on day 868 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 160 for 100. Bought on day 94 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
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O(n): Sold on day 160 for 100. Bought on day 94 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 960 for 100. Bought on day 911 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 80 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 80 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 891 for 100. Bought on day 888 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 45 for 100. Bought on day 32 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 45 for 100. Bought on day 32 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 924 for 100. Bought on day 816 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 84 for 100. Bought on day 64 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 84 for 100. Bought on day 64 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 988 for 100. Bought on day 944 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 166 for 100. Bought on day 164 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 166 for 100. Bought on day 164 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 990 for 100. Bought on day 939 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 344 for 100. Bought on day 318 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 344 for 100. Bought on day 318 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 960 for 100. Bought on day 835 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 61 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 61 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 883 for 100. Bought on day 812 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 238 for 100. Bought on day 233 for 50. Profit = 100-50 = 50
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O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 238 for 100. Bought on day 233 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 922 for 100. Bought on day 853 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 78 for 100. Bought on day 77 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 78 for 100. Bought on day 77 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 970 for 100. Bought on day 916 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 74 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 74 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 990 for 100. Bought on day 944 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 164 for 100. Bought on day 131 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 164 for 100. Bought on day 131 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 948 for 100. Bought on day 943 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 115 for 100. Bought on day 87 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 115 for 100. Bought on day 87 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 856 for 100. Bought on day 855 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 59 for 100. Bought on day 19 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 59 for 100. Bought on day 19 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 958 for 100. Bought on day 889 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 201 for 100. Bought on day 28 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 201 for 100. Bought on day 28 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 960 for 100. Bought on day 835 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
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O(nlogn): Sold on day 247 for 100. Bought on day 241 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 247 for 100. Bought on day 241 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 950 for 100. Bought on day 943 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 45 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 45 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 976 for 100. Bought on day 916 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 109 for 100. Bought on day 108 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 109 for 100. Bought on day 108 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 974 for 100. Bought on day 928 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 31 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 31 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 990 for 100. Bought on day 963 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 77 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 77 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 954 for 100. Bought on day 934 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 102 for 100. Bought on day 82 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 102 for 100. Bought on day 82 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 947 for 100. Bought on day 928 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 163 for 100. Bought on day 147 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 163 for 100. Bought on day 147 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 935 for 100. Bought on day 761 for 50. Profit = 100-50 = 50
```

```
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 108 for 100. Bought on day 105 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 108 for 100. Bought on day 105 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 988 for 100. Bought on day 889 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 202 for 100. Bought on day 191 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 202 for 100. Bought on day 191 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 961 for 100. Bought on day 799 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 179 for 100. Bought on day 167 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 179 for 100. Bought on day 167 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 847 for 100. Bought on day 755 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 42 for 100. Bought on day 29 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 42 for 100. Bought on day 29 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 998 for 100. Bought on day 991 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 60 for 100. Bought on day 53 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 60 for 100. Bought on day 53 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 981 for 100. Bought on day 975 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 162 for 100. Bought on day 130 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 162 for 100. Bought on day 130 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 899 for 100. Bought on day 877 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 82 for 100. Bought on day 54 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 82 for 100. Bought on day 54 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

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O(n^2): Sold on day 926 for 100. Bought on day 886 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 220 for 100. Bought on day 64 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 220 for 100. Bought on day 64 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 935 for 100. Bought on day 903 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 247 for 100. Bought on day 131 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 247 for 100. Bought on day 131 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 971 for 100. Bought on day 919 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 383 for 100. Bought on day 264 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 383 for 100. Bought on day 264 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 956 for 100. Bought on day 955 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 82 for 100. Bought on day 55 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 82 for 100. Bought on day 55 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 973 for 100. Bought on day 967 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 64 for 100. Bought on day 26 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 64 for 100. Bought on day 26 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 998 for 100. Bought on day 965 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 34 for 100. Bought on day 17 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 34 for 100. Bought on day 17 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 933 for 100. Bought on day 847 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 62 for 100. Bought on day 47 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 62 for 100. Bought on day 47 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
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--- Array length is 1000
O(n^2): Sold on day 965 for 100. Bought on day 884 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 359 for 100. Bought on day 330 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 359 for 100. Bought on day 330 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 938 for 100. Bought on day 911 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 224 for 100. Bought on day 219 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 224 for 100. Bought on day 219 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 999 for 100. Bought on day 980 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 51 for 100. Bought on day 31 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 51 for 100. Bought on day 31 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 946 for 100. Bought on day 933 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 32 for 100. Bought on day 17 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 32 for 100. Bought on day 17 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 893 for 100. Bought on day 884 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 42 for 100. Bought on day 5 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 42 for 100. Bought on day 5 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 902 for 100. Bought on day 898 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 143 for 100. Bought on day 135 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 143 for 100. Bought on day 135 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 961 for 100. Bought on day 951 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 245 for 100. Bought on day 206 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 245 for 100. Bought on day 206 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

--- Array length is 1000  $O(n^2)$ : Sold on day 835 for 100. Bought on day 761 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 37 for 100. Bought on day 36 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 37 for 100. Bought on day 36 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 916 for 100. Bought on day 735 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 139 for 100. Bought on day 134 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 139 for 100. Bought on day 134 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 935 for 100. Bought on day 852 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 89 for 100. Bought on day 72 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 89 for 100. Bought on day 72 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 . --- Array length is 1000  $O(n^2)$ : Sold on day 949 for 100. Bought on day 947 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 36 for 100. Bought on day 29 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 36 for 100. Bought on day 29 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 994 for 100. Bought on day 984 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 221 for 100. Bought on day 219 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 221 for 100. Bought on day 219 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 -------- Array length is 1000  $O(n^2)$ : Sold on day 995 for 100. Bought on day 934 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 52 for 100. Bought on day 23 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 52 for 100. Bought on day 23 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 999 for 100. Bought on day 970 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 230 for 100. Bought on day 155 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 230 for 100. Bought on day 155 for 50. Profit = 100-50 = 50

```
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 973 for 100. Bought on day 937 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 174 for 100. Bought on day 59 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 174 for 100. Bought on day 59 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 993 for 100. Bought on day 848 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 79 for 100. Bought on day 32 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 79 for 100. Bought on day 32 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 988 for 100. Bought on day 970 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 79 for 100. Bought on day 40 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 79 for 100. Bought on day 40 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 989 for 100. Bought on day 952 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 88 for 100. Bought on day 29 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 88 for 100. Bought on day 29 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 968 for 100. Bought on day 955 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 111 for 100. Bought on day 17 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 111 for 100. Bought on day 17 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 893 for 100. Bought on day 884 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 23 for 100. Bought on day 9 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 23 for 100. Bought on day 9 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 996 for 100. Bought on day 981 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 326 for 100. Bought on day 311 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
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O(n): Sold on day 326 for 100. Bought on day 311 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 885 for 100. Bought on day 796 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 73 for 100. Bought on day 67 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 73 for 100. Bought on day 67 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 915 for 100. Bought on day 847 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 335 for 100. Bought on day 260 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 335 for 100. Bought on day 260 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 934 for 100. Bought on day 855 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 7 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 7 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 968 for 100. Bought on day 963 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 29 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 29 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 969 for 100. Bought on day 964 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 109 for 100. Bought on day 93 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 109 for 100. Bought on day 93 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 949 for 100. Bought on day 884 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 170 for 100. Bought on day 166 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 170 for 100. Bought on day 166 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 922 for 100. Bought on day 892 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
```

O(nlogn): Sold on day 225 for 100. Bought on day 220 for 50. Profit = 100-50 = 50

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O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 225 for 100. Bought on day 220 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 943 for 100. Bought on day 936 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 110 for 100. Bought on day 94 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 110 for 100. Bought on day 94 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 906 for 100. Bought on day 899 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 36 for 100. Bought on day 32 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 36 for 100. Bought on day 32 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 925 for 100. Bought on day 912 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 236 for 100. Bought on day 147 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 \text{ numDivide} = 511 \text{ numConquer} = 511
O(n): Sold on day 236 for 100. Bought on day 147 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 928 for 100. Bought on day 905 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 28 for 100. Bought on day 25 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 28 for 100. Bought on day 25 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 957 for 100. Bought on day 924 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 422 for 100. Bought on day 417 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 422 for 100. Bought on day 417 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 965 for 100. Bought on day 948 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 48 for 100. Bought on day 9 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 48 for 100. Bought on day 9 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 993 for 100. Bought on day 871 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
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O(n\log n): Sold on day 83 for 100. Bought on day 80 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 83 for 100. Bought on day 80 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 953 for 100. Bought on day 934 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 72 for 100. Bought on day 71 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 72 for 100. Bought on day 71 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 930 for 100. Bought on day 910 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 216 for 100. Bought on day 196 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 216 for 100. Bought on day 196 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 991 for 100. Bought on day 909 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 83 for 100. Bought on day 66 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 83 for 100. Bought on day 66 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 937 for 100. Bought on day 873 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 211 for 100. Bought on day 208 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 211 for 100. Bought on day 208 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 981 for 100. Bought on day 939 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 115 for 100. Bought on day 107 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 115 for 100. Bought on day 107 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 996 for 100. Bought on day 950 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 144 for 100. Bought on day 140 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 144 for 100. Bought on day 140 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 992 for 100. Bought on day 828 for 50. Profit = 100-50 = 50
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O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 19 for 100. Bought on day 9 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 19 for 100. Bought on day 9 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 995 for 100. Bought on day 923 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 90 for 100. Bought on day 76 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 90 for 100. Bought on day 76 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 999 for 100. Bought on day 972 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 75 for 100. Bought on day 72 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 75 for 100. Bought on day 72 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 908 for 100. Bought on day 872 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 109 for 100. Bought on day 44 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 109 for 100. Bought on day 44 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 959 for 100. Bought on day 799 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 149 for 100. Bought on day 98 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 149 for 100. Bought on day 98 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 828 for 100. Bought on day 763 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 224 for 100. Bought on day 205 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 224 for 100. Bought on day 205 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 866 for 100. Bought on day 798 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 33 for 100. Bought on day 6 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 33 for 100. Bought on day 6 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

```
O(n^2): Sold on day 978 for 100. Bought on day 969 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 133 for 100. Bought on day 76 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 133 for 100. Bought on day 76 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 899 for 100. Bought on day 886 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 66 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 66 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 935 for 100. Bought on day 905 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 82 for 100. Bought on day 73 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 82 for 100. Bought on day 73 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 938 for 100. Bought on day 858 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 30 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 30 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 918 for 100. Bought on day 912 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 96 for 100. Bought on day 31 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 96 for 100. Bought on day 31 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 888 for 100. Bought on day 821 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 57 for 100. Bought on day 56 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 57 for 100. Bought on day 56 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 997 for 100. Bought on day 928 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 95 for 100. Bought on day 84 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 95 for 100. Bought on day 84 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

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--- Array length is 1000
O(n^2): Sold on day 952 for 100. Bought on day 754 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 498 for 100. Bought on day 495 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 498 for 100. Bought on day 495 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 938 for 100. Bought on day 889 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 41 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 41 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 970 for 100. Bought on day 958 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 113 for 100. Bought on day 65 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 113 for 100. Bought on day 65 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 896 for 100. Bought on day 801 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 52 for 100. Bought on day 18 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 52 for 100. Bought on day 18 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 631 for 100. Bought on day 630 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 108 for 100. Bought on day 98 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 108 for 100. Bought on day 98 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 986 for 100. Bought on day 961 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 48 for 100. Bought on day 33 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 48 for 100. Bought on day 33 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 992 for 100. Bought on day 991 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 62 for 100. Bought on day 24 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 62 for 100. Bought on day 24 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

--- Array length is 1000  $O(n^2)$ : Sold on day 995 for 100. Bought on day 939 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 247 for 100. Bought on day 243 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 247 for 100. Bought on day 243 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 998 for 100. Bought on day 931 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 196 for 100. Bought on day 182 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 196 for 100. Bought on day 182 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 996 for 100. Bought on day 882 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 219 for 100. Bought on day 178 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 219 for 100. Bought on day 178 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 . --- Array length is 1000  $O(n^2)$ : Sold on day 992 for 100. Bought on day 977 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 46 for 100. Bought on day 3 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 46 for 100. Bought on day 3 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 \_\_\_\_\_ --- Array length is 1000  $O(n^2)$ : Sold on day 921 for 100. Bought on day 813 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 103 for 100. Bought on day 98 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 103 for 100. Bought on day 98 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 -------- Array length is 1000  $O(n^2)$ : Sold on day 952 for 100. Bought on day 922 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 61 for 100. Bought on day 22 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 61 for 100. Bought on day 22 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 985 for 100. Bought on day 975 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 244 for 100. Bought on day 229 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 244 for 100. Bought on day 229 for 50. Profit = 100-50 = 50

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numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 997 for 100. Bought on day 923 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 36 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 36 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 931 for 100. Bought on day 879 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 31 for 100. Bought on day 27 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 31 for 100. Bought on day 27 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 963 for 100. Bought on day 955 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 39 for 100. Bought on day 18 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 39 for 100. Bought on day 18 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 994 for 100. Bought on day 932 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 35 for 100. Bought on day 34 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 35 for 100. Bought on day 34 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 991 for 100. Bought on day 990 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 47 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 47 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 981 for 100. Bought on day 835 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 69 for 100. Bought on day 64 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 69 for 100. Bought on day 64 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 952 for 100. Bought on day 912 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 217 for 100. Bought on day 190 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
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O(n): Sold on day 217 for 100. Bought on day 190 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 997 for 100. Bought on day 943 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 118 for 100. Bought on day 26 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 118 for 100. Bought on day 26 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 893 for 100. Bought on day 863 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 136 for 100. Bought on day 18 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 136 for 100. Bought on day 18 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 912 for 100. Bought on day 687 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 150 for 100. Bought on day 118 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 150 for 100. Bought on day 118 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 957 for 100. Bought on day 919 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 139 for 100. Bought on day 133 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 139 for 100. Bought on day 133 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 995 for 100. Bought on day 933 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 20 for 100. Bought on day 18 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 20 for 100. Bought on day 18 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 939 for 100. Bought on day 936 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 53 for 100. Bought on day 33 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 53 for 100. Bought on day 33 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 953 for 100. Bought on day 945 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 37 for 100. Bought on day 36 for 50. Profit = 100-50 = 50
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O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 37 for 100. Bought on day 36 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 995 for 100. Bought on day 978 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 149 for 100. Bought on day 140 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 149 for 100. Bought on day 140 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 975 for 100. Bought on day 956 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 36 for 100. Bought on day 17 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 36 for 100. Bought on day 17 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 978 for 100. Bought on day 969 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 189 for 100. Bought on day 142 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 189 for 100. Bought on day 142 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 958 for 100. Bought on day 929 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 54 for 100. Bought on day 39 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 54 for 100. Bought on day 39 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 891 for 100. Bought on day 841 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 61 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 61 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 996 for 100. Bought on day 988 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 60 for 100. Bought on day 36 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 60 for 100. Bought on day 36 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 950 for 100. Bought on day 770 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
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O(nlogn): Sold on day 199 for 100. Bought on day 192 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 199 for 100. Bought on day 192 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 933 for 100. Bought on day 805 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 80 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 80 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 950 for 100. Bought on day 920 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 145 for 100. Bought on day 125 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 145 for 100. Bought on day 125 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 923 for 100. Bought on day 922 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 121 for 100. Bought on day 40 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 121 for 100. Bought on day 40 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 943 for 100. Bought on day 862 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 340 for 100. Bought on day 289 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 340 for 100. Bought on day 289 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 946 for 100. Bought on day 808 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 38 for 100. Bought on day 37 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 38 for 100. Bought on day 37 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 993 for 100. Bought on day 970 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 70 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 70 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 970 for 100. Bought on day 950 for 50. Profit = 100-50 = 50
```

```
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 103 for 100. Bought on day 81 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 103 for 100. Bought on day 81 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 984 for 100. Bought on day 966 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 62 for 100. Bought on day 32 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 62 for 100. Bought on day 32 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 997 for 100. Bought on day 930 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 57 for 100. Bought on day 28 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 57 for 100. Bought on day 28 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 990 for 100. Bought on day 966 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 108 for 100. Bought on day 22 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 108 for 100. Bought on day 22 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 988 for 100. Bought on day 891 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 9 for 100. Bought on day 1 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 9 for 100. Bought on day 1 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 907 for 100. Bought on day 894 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 219 for 100. Bought on day 33 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 219 for 100. Bought on day 33 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 963 for 100. Bought on day 939 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 68 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 68 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

```
O(n^2): Sold on day 977 for 100. Bought on day 968 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 115 for 100. Bought on day 86 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 115 for 100. Bought on day 86 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 975 for 100. Bought on day 968 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 44 for 100. Bought on day 43 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 44 for 100. Bought on day 43 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 994 for 100. Bought on day 988 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 119 for 100. Bought on day 7 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 119 for 100. Bought on day 7 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 934 for 100. Bought on day 852 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 79 for 100. Bought on day 70 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 79 for 100. Bought on day 70 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 864 for 100. Bought on day 766 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 180 for 100. Bought on day 157 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 180 for 100. Bought on day 157 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 994 for 100. Bought on day 949 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 59 for 100. Bought on day 50 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 59 for 100. Bought on day 50 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 938 for 100. Bought on day 926 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 47 for 100. Bought on day 34 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 47 for 100. Bought on day 34 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

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--- Array length is 1000
O(n^2): Sold on day 941 for 100. Bought on day 886 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 27 for 100. Bought on day 5 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 27 for 100. Bought on day 5 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 989 for 100. Bought on day 929 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 61 for 100. Bought on day 33 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 61 for 100. Bought on day 33 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 972 for 100. Bought on day 876 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 63 for 100. Bought on day 51 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 63 for 100. Bought on day 51 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 839 for 100. Bought on day 835 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 15 for 100. Bought on day 9 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 15 for 100. Bought on day 9 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 903 for 100. Bought on day 846 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 224 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 224 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 945 for 100. Bought on day 903 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 181 for 100. Bought on day 165 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 181 for 100. Bought on day 165 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 845 for 100. Bought on day 816 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 215 for 100. Bought on day 207 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 215 for 100. Bought on day 207 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

--- Array length is 1000  $O(n^2)$ : Sold on day 930 for 100. Bought on day 929 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 26 for 100. Bought on day 24 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 26 for 100. Bought on day 24 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 964 for 100. Bought on day 865 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 248 for 100. Bought on day 121 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511O(n): Sold on day 248 for 100. Bought on day 121 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 867 for 100. Bought on day 832 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 228 for 100. Bought on day 221 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 228 for 100. Bought on day 221 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 . --- Array length is 1000  $O(n^2)$ : Sold on day 970 for 100. Bought on day 956 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 37 for 100. Bought on day 36 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 37 for 100. Bought on day 36 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 995 for 100. Bought on day 902 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 76 for 100. Bought on day 73 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 76 for 100. Bought on day 73 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 -------- Array length is 1000  $O(n^2)$ : Sold on day 936 for 100. Bought on day 884 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 43 for 100. Bought on day 20 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 43 for 100. Bought on day 20 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 998 for 100. Bought on day 997 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 101 for 100. Bought on day 98 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 101 for 100. Bought on day 98 for 50. Profit = 100-50 = 50

```
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 979 for 100. Bought on day 936 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 157 for 100. Bought on day 30 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 157 for 100. Bought on day 30 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 992 for 100. Bought on day 986 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 54 for 100. Bought on day 18 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 54 for 100. Bought on day 18 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 980 for 100. Bought on day 938 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 98 for 100. Bought on day 17 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 98 for 100. Bought on day 17 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 955 for 100. Bought on day 878 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 56 for 100. Bought on day 27 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 56 for 100. Bought on day 27 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 905 for 100. Bought on day 901 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 93 for 100. Bought on day 87 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 93 for 100. Bought on day 87 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 997 for 100. Bought on day 773 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 89 for 100. Bought on day 62 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 89 for 100. Bought on day 62 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 918 for 100. Bought on day 903 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 159 for 100. Bought on day 153 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
```

```
O(n): Sold on day 159 for 100. Bought on day 153 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 969 for 100. Bought on day 964 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 119 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 119 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 959 for 100. Bought on day 943 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 195 for 100. Bought on day 175 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 195 for 100. Bought on day 175 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 967 for 100. Bought on day 927 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 134 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 134 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 864 for 100. Bought on day 765 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 60 for 100. Bought on day 59 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 60 for 100. Bought on day 59 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 851 for 100. Bought on day 815 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 117 for 100. Bought on day 82 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 117 for 100. Bought on day 82 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 905 for 100. Bought on day 815 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 80 for 100. Bought on day 66 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 80 for 100. Bought on day 66 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 938 for 100. Bought on day 916 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
```

O(nlogn): Sold on day 86 for 100. Bought on day 78 for 50. Profit = 100-50 = 50

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O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 86 for 100. Bought on day 78 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 906 for 100. Bought on day 894 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 238 for 100. Bought on day 128 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 238 for 100. Bought on day 128 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 861 for 100. Bought on day 840 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 183 for 100. Bought on day 150 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 183 for 100. Bought on day 150 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 986 for 100. Bought on day 952 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 70 for 100. Bought on day 28 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 70 for 100. Bought on day 28 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 970 for 100. Bought on day 966 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 219 for 100. Bought on day 171 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 219 for 100. Bought on day 171 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 999 for 100. Bought on day 984 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 57 for 100. Bought on day 29 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 \text{ numDivide} = 511 \text{ numConquer} = 511
O(n): Sold on day 57 for 100. Bought on day 29 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 915 for 100. Bought on day 909 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 175 for 100. Bought on day 171 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 175 for 100. Bought on day 171 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 973 for 100. Bought on day 885 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
```

```
O(nlogn): Sold on day 111 for 100. Bought on day 98 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 111 for 100. Bought on day 98 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 976 for 100. Bought on day 937 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 37 for 100. Bought on day 18 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 37 for 100. Bought on day 18 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 950 for 100. Bought on day 805 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 44 for 100. Bought on day 1 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 44 for 100. Bought on day 1 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 993 for 100. Bought on day 989 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 41 for 100. Bought on day 17 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 41 for 100. Bought on day 17 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 990 for 100. Bought on day 956 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 109 for 100. Bought on day 95 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 109 for 100. Bought on day 95 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 998 for 100. Bought on day 837 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 60 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 60 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 951 for 100. Bought on day 931 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 21 for 100. Bought on day 5 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 21 for 100. Bought on day 5 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 989 for 100. Bought on day 982 for 50. Profit = 100-50 = 50
```

```
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 1 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 1 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 958 for 100. Bought on day 888 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 159 for 100. Bought on day 150 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 159 for 100. Bought on day 150 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 991 for 100. Bought on day 819 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 71 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 71 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 909 for 100. Bought on day 905 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 190 for 100. Bought on day 176 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 190 for 100. Bought on day 176 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 982 for 100. Bought on day 981 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 10 for 100. Bought on day 5 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 10 for 100. Bought on day 5 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 987 for 100. Bought on day 966 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 62 for 100. Bought on day 57 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 62 for 100. Bought on day 57 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 957 for 100. Bought on day 927 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 119 for 100. Bought on day 43 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 119 for 100. Bought on day 43 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

```
O(n^2): Sold on day 964 for 100. Bought on day 958 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 57 for 100. Bought on day 12 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 57 for 100. Bought on day 12 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 892 for 100. Bought on day 809 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 123 for 100. Bought on day 96 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 123 for 100. Bought on day 96 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 979 for 100. Bought on day 870 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 225 for 100. Bought on day 141 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 225 for 100. Bought on day 141 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 995 for 100. Bought on day 891 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 84 for 100. Bought on day 79 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 84 for 100. Bought on day 79 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 998 for 100. Bought on day 989 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 138 for 100. Bought on day 134 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 138 for 100. Bought on day 134 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 963 for 100. Bought on day 939 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 78 for 100. Bought on day 56 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 78 for 100. Bought on day 56 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 979 for 100. Bought on day 928 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 106 for 100. Bought on day 89 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 106 for 100. Bought on day 89 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

```
--- Array length is 1000
O(n^2): Sold on day 797 for 100. Bought on day 796 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 154 for 100. Bought on day 144 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 154 for 100. Bought on day 144 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 947 for 100. Bought on day 937 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 136 for 100. Bought on day 84 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 136 for 100. Bought on day 84 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 964 for 100. Bought on day 886 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 27 for 100. Bought on day 9 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 27 for 100. Bought on day 9 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 974 for 100. Bought on day 970 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 56 for 100. Bought on day 29 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 56 for 100. Bought on day 29 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 992 for 100. Bought on day 904 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 217 for 100. Bought on day 207 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 217 for 100. Bought on day 207 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 982 for 100. Bought on day 958 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 94 for 100. Bought on day 69 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 94 for 100. Bought on day 69 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 964 for 100. Bought on day 749 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 115 for 100. Bought on day 69 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 115 for 100. Bought on day 69 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

--- Array length is 1000  $O(n^2)$ : Sold on day 997 for 100. Bought on day 970 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 51 for 100. Bought on day 40 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 51 for 100. Bought on day 40 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 927 for 100. Bought on day 908 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 58 for 100. Bought on day 8 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 58 for 100. Bought on day 8 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 988 for 100. Bought on day 954 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 240 for 100. Bought on day 62 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 240 for 100. Bought on day 62 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 . --- Array length is 1000  $O(n^2)$ : Sold on day 884 for 100. Bought on day 796 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 366 for 100. Bought on day 348 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 366 for 100. Bought on day 348 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 909 for 100. Bought on day 906 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 69 for 100. Bought on day 24 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 69 for 100. Bought on day 24 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 -------- Array length is 1000  $O(n^2)$ : Sold on day 899 for 100. Bought on day 743 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 165 for 100. Bought on day 74 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 165 for 100. Bought on day 74 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 959 for 100. Bought on day 791 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 17 for 100. Bought on day 5 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 17 for 100. Bought on day 5 for 50. Profit = 100-50 = 50

```
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 821 for 100. Bought on day 731 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 55 for 100. Bought on day 51 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 55 for 100. Bought on day 51 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 846 for 100. Bought on day 834 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 81 for 100. Bought on day 52 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 81 for 100. Bought on day 52 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 989 for 100. Bought on day 939 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 156 for 100. Bought on day 140 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 156 for 100. Bought on day 140 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 931 for 100. Bought on day 901 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 46 for 100. Bought on day 38 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 46 for 100. Bought on day 38 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 990 for 100. Bought on day 902 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 41 for 100. Bought on day 31 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 41 for 100. Bought on day 31 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 999 for 100. Bought on day 967 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 89 for 100. Bought on day 82 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 89 for 100. Bought on day 82 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 979 for 100. Bought on day 958 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 187 for 100. Bought on day 170 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
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O(n): Sold on day 187 for 100. Bought on day 170 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 993 for 100. Bought on day 906 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 145 for 100. Bought on day 131 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 145 for 100. Bought on day 131 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 934 for 100. Bought on day 912 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 60 for 100. Bought on day 43 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 60 for 100. Bought on day 43 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 899 for 100. Bought on day 850 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 116 for 100. Bought on day 86 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 116 for 100. Bought on day 86 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 740 for 100. Bought on day 737 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 15 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 15 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 937 for 100. Bought on day 922 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 99 for 100. Bought on day 86 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 99 for 100. Bought on day 86 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 864 for 100. Bought on day 851 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 268 for 100. Bought on day 254 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 268 for 100. Bought on day 254 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 860 for 100. Bought on day 796 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
```

 $O(n\log n)$ : Sold on day 12 for 100. Bought on day 2 for 50. Profit = 100-50 = 50

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O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 12 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 900 for 100. Bought on day 875 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 187 for 100. Bought on day 168 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 187 for 100. Bought on day 168 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 923 for 100. Bought on day 879 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 217 for 100. Bought on day 206 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 217 for 100. Bought on day 206 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 967 for 100. Bought on day 960 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 50 for 100. Bought on day 20 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 50 for 100. Bought on day 20 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 991 for 100. Bought on day 800 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 225 for 100. Bought on day 171 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 225 for 100. Bought on day 171 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 974 for 100. Bought on day 856 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 247 for 100. Bought on day 220 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 \text{ numDivide} = 511 \text{ numConquer} = 511
O(n): Sold on day 247 for 100. Bought on day 220 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 953 for 100. Bought on day 950 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 324 for 100. Bought on day 303 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 324 for 100. Bought on day 303 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 852 for 100. Bought on day 827 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
```

```
O(n\log n): Sold on day 55 for 100. Bought on day 33 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 55 for 100. Bought on day 33 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 960 for 100. Bought on day 941 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 23 for 100. Bought on day 3 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 23 for 100. Bought on day 3 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 809 for 100. Bought on day 795 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 232 for 100. Bought on day 224 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 232 for 100. Bought on day 224 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 917 for 100. Bought on day 899 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 131 for 100. Bought on day 36 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 131 for 100. Bought on day 36 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 970 for 100. Bought on day 963 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 214 for 100. Bought on day 154 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 214 for 100. Bought on day 154 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 998 for 100. Bought on day 984 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 174 for 100. Bought on day 158 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 174 for 100. Bought on day 158 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 997 for 100. Bought on day 904 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 78 for 100. Bought on day 65 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 78 for 100. Bought on day 65 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 855 for 100. Bought on day 662 for 50. Profit = 100-50 = 50
```

```
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 173 for 100. Bought on day 126 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 173 for 100. Bought on day 126 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 939 for 100. Bought on day 812 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 7 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 7 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 988 for 100. Bought on day 940 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 112 for 100. Bought on day 87 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 112 for 100. Bought on day 87 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 960 for 100. Bought on day 933 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 14 for 100. Bought on day 3 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 14 for 100. Bought on day 3 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 884 for 100. Bought on day 844 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 165 for 100. Bought on day 161 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 165 for 100. Bought on day 161 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 968 for 100. Bought on day 911 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 476 for 100. Bought on day 401 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 476 for 100. Bought on day 401 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 986 for 100. Bought on day 616 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 113 for 100. Bought on day 72 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 113 for 100. Bought on day 72 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

```
O(n^2): Sold on day 640 for 100. Bought on day 578 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 15 for 100. Bought on day 5 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 15 for 100. Bought on day 5 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 990 for 100. Bought on day 927 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 249 for 100. Bought on day 152 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 249 for 100. Bought on day 152 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 943 for 100. Bought on day 934 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 196 for 100. Bought on day 173 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 196 for 100. Bought on day 173 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 978 for 100. Bought on day 833 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 118 for 100. Bought on day 92 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 118 for 100. Bought on day 92 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 956 for 100. Bought on day 952 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 207 for 100. Bought on day 153 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 207 for 100. Bought on day 153 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 967 for 100. Bought on day 865 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 151 for 100. Bought on day 136 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 151 for 100. Bought on day 136 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 985 for 100. Bought on day 984 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 46 for 100. Bought on day 16 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 46 for 100. Bought on day 16 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

```
--- Array length is 1000
O(n^2): Sold on day 919 for 100. Bought on day 894 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 92 for 100. Bought on day 81 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 92 for 100. Bought on day 81 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 927 for 100. Bought on day 784 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 220 for 100. Bought on day 177 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 220 for 100. Bought on day 177 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 945 for 100. Bought on day 849 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 114 for 100. Bought on day 85 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 114 for 100. Bought on day 85 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 954 for 100. Bought on day 822 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 79 for 100. Bought on day 78 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 79 for 100. Bought on day 78 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 809 for 100. Bought on day 729 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 92 for 100. Bought on day 3 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 92 for 100. Bought on day 3 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Arrav length is 1000
O(n^2): Sold on day 957 for 100. Bought on day 930 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 188 for 100. Bought on day 154 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 188 for 100. Bought on day 154 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 998 for 100. Bought on day 958 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 24 for 100. Bought on day 3 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 24 for 100. Bought on day 3 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

--- Array length is 1000  $O(n^2)$ : Sold on day 916 for 100. Bought on day 904 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 43 for 100. Bought on day 22 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 43 for 100. Bought on day 22 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 895 for 100. Bought on day 724 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 29 for 100. Bought on day 7 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 29 for 100. Bought on day 7 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 918 for 100. Bought on day 846 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 61 for 100. Bought on day 1 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 61 for 100. Bought on day 1 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 . --- Array length is 1000  $O(n^2)$ : Sold on day 999 for 100. Bought on day 943 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 187 for 100. Bought on day 185 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 187 for 100. Bought on day 185 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 \_\_\_\_\_ --- Array length is 1000  $O(n^2)$ : Sold on day 943 for 100. Bought on day 934 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 118 for 100. Bought on day 51 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 118 for 100. Bought on day 51 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 -------- Array length is 1000  $O(n^2)$ : Sold on day 996 for 100. Bought on day 995 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 31 for 100. Bought on day 20 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 31 for 100. Bought on day 20 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 980 for 100. Bought on day 965 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 22 for 100. Bought on day 18 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 22 for 100. Bought on day 18 for 50. Profit = 100-50 = 50

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numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 975 for 100. Bought on day 862 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 153 for 100. Bought on day 126 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 153 for 100. Bought on day 126 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 726 for 100. Bought on day 720 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 103 for 100. Bought on day 82 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 103 for 100. Bought on day 82 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 990 for 100. Bought on day 947 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 104 for 100. Bought on day 46 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 104 for 100. Bought on day 46 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 900 for 100. Bought on day 803 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 118 for 100. Bought on day 104 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 118 for 100. Bought on day 104 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 992 for 100. Bought on day 984 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 26 for 100. Bought on day 12 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 26 for 100. Bought on day 12 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 908 for 100. Bought on day 777 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 13 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 13 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 993 for 100. Bought on day 988 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 100 for 100. Bought on day 85 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
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O(n): Sold on day 100 for 100. Bought on day 85 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 957 for 100. Bought on day 889 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 112 for 100. Bought on day 47 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 112 for 100. Bought on day 47 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 937 for 100. Bought on day 902 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 109 for 100. Bought on day 97 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 109 for 100. Bought on day 97 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 992 for 100. Bought on day 940 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 202 for 100. Bought on day 128 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 202 for 100. Bought on day 128 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 928 for 100. Bought on day 897 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 67 for 100. Bought on day 16 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 67 for 100. Bought on day 16 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 941 for 100. Bought on day 876 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 88 for 100. Bought on day 87 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 88 for 100. Bought on day 87 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 982 for 100. Bought on day 978 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 51 for 100. Bought on day 47 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 51 for 100. Bought on day 47 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 952 for 100. Bought on day 938 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 59 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
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O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 59 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 889 for 100. Bought on day 887 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 100 for 100. Bought on day 96 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 100 for 100. Bought on day 96 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 921 for 100. Bought on day 883 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 84 for 100. Bought on day 12 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 84 for 100. Bought on day 12 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 961 for 100. Bought on day 873 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 58 for 100. Bought on day 26 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 58 for 100. Bought on day 26 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 932 for 100. Bought on day 794 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 22 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 22 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 994 for 100. Bought on day 979 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 36 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 36 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 925 for 100. Bought on day 921 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 218 for 100. Bought on day 115 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 218 for 100. Bought on day 115 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 998 for 100. Bought on day 994 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
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O(n\log n): Sold on day 83 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 83 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 872 for 100. Bought on day 823 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 200 for 100. Bought on day 140 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 200 for 100. Bought on day 140 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 897 for 100. Bought on day 890 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 79 for 100. Bought on day 66 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 79 for 100. Bought on day 66 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 985 for 100. Bought on day 969 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 59 for 100. Bought on day 49 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 59 for 100. Bought on day 49 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 950 for 100. Bought on day 944 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 76 for 100. Bought on day 66 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 76 for 100. Bought on day 66 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 998 for 100. Bought on day 975 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 30 for 100. Bought on day 22 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 30 for 100. Bought on day 22 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 917 for 100. Bought on day 914 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 190 for 100. Bought on day 136 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 190 for 100. Bought on day 136 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
```

 $O(n^2)$ : Sold on day 894 for 100. Bought on day 814 for 50. Profit = 100-50 = 50

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O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 196 for 100. Bought on day 65 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 196 for 100. Bought on day 65 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 958 for 100. Bought on day 898 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 121 for 100. Bought on day 112 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 121 for 100. Bought on day 112 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 966 for 100. Bought on day 961 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 93 for 100. Bought on day 65 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 93 for 100. Bought on day 65 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 952 for 100. Bought on day 902 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 43 for 100. Bought on day 32 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 43 for 100. Bought on day 32 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 997 for 100. Bought on day 987 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 12 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 12 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 997 for 100. Bought on day 864 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 230 for 100. Bought on day 191 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 230 for 100. Bought on day 191 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 783 for 100. Bought on day 682 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 68 for 100. Bought on day 29 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 68 for 100. Bought on day 29 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

```
O(n^2): Sold on day 927 for 100. Bought on day 864 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 498 for 100. Bought on day 445 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 498 for 100. Bought on day 445 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 961 for 100. Bought on day 893 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 92 for 100. Bought on day 75 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 92 for 100. Bought on day 75 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 916 for 100. Bought on day 862 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 54 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 54 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 958 for 100. Bought on day 927 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 219 for 100. Bought on day 17 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 219 for 100. Bought on day 17 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 923 for 100. Bought on day 861 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 14 for 100. Bought on day 12 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 14 for 100. Bought on day 12 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 993 for 100. Bought on day 964 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 44 for 100. Bought on day 43 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 44 for 100. Bought on day 43 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 879 for 100. Bought on day 855 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 44 for 100. Bought on day 30 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 44 for 100. Bought on day 30 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

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--- Array length is 1000
O(n^2): Sold on day 980 for 100. Bought on day 964 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 100 for 100. Bought on day 81 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 100 for 100. Bought on day 81 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 920 for 100. Bought on day 896 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 24 for 100. Bought on day 23 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 24 for 100. Bought on day 23 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 906 for 100. Bought on day 873 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 171 for 100. Bought on day 157 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 171 for 100. Bought on day 157 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 998 for 100. Bought on day 970 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 7 for 100. Bought on day 3 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 7 for 100. Bought on day 3 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 989 for 100. Bought on day 986 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 37 for 100. Bought on day 36 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 37 for 100. Bought on day 36 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 990 for 100. Bought on day 983 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 152 for 100. Bought on day 144 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 152 for 100. Bought on day 144 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 959 for 100. Bought on day 915 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 102 for 100. Bought on day 53 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 102 for 100. Bought on day 53 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

--- Array length is 1000  $O(n^2)$ : Sold on day 995 for 100. Bought on day 976 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 24 for 100. Bought on day 14 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 24 for 100. Bought on day 14 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 980 for 100. Bought on day 774 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 73 for 100. Bought on day 17 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 73 for 100. Bought on day 17 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 979 for 100. Bought on day 827 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 115 for 100. Bought on day 4 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 115 for 100. Bought on day 4 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 . --- Array length is 1000  $O(n^2)$ : Sold on day 985 for 100. Bought on day 840 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 32 for 100. Bought on day 20 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 32 for 100. Bought on day 20 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 885 for 100. Bought on day 860 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 73 for 100. Bought on day 70 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 73 for 100. Bought on day 70 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 -------- Array length is 1000  $O(n^2)$ : Sold on day 992 for 100. Bought on day 980 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 62 for 100. Bought on day 60 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 62 for 100. Bought on day 60 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 992 for 100. Bought on day 937 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 93 for 100. Bought on day 6 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 93 for 100. Bought on day 6 for 50. Profit = 100-50 = 50

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numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 968 for 100. Bought on day 933 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 64 for 100. Bought on day 43 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 64 for 100. Bought on day 43 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 914 for 100. Bought on day 833 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 53 for 100. Bought on day 38 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 53 for 100. Bought on day 38 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 992 for 100. Bought on day 833 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 168 for 100. Bought on day 151 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 168 for 100. Bought on day 151 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 971 for 100. Bought on day 935 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 105 for 100. Bought on day 91 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 105 for 100. Bought on day 91 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 941 for 100. Bought on day 883 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 101 for 100. Bought on day 99 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 101 for 100. Bought on day 99 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 977 for 100. Bought on day 967 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 111 for 100. Bought on day 41 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 111 for 100. Bought on day 41 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 961 for 100. Bought on day 959 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 16 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
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O(n): Sold on day 16 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 928 for 100. Bought on day 857 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 107 for 100. Bought on day 90 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 107 for 100. Bought on day 90 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 898 for 100. Bought on day 863 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 123 for 100. Bought on day 86 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 123 for 100. Bought on day 86 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 995 for 100. Bought on day 991 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 243 for 100. Bought on day 220 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 243 for 100. Bought on day 220 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 987 for 100. Bought on day 856 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 184 for 100. Bought on day 148 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 184 for 100. Bought on day 148 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 930 for 100. Bought on day 927 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 48 for 100. Bought on day 43 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 48 for 100. Bought on day 43 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 939 for 100. Bought on day 782 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 92 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 92 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 889 for 100. Bought on day 870 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 98 for 100. Bought on day 97 for 50. Profit = 100-50 = 50
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O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 98 for 100. Bought on day 97 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 974 for 100. Bought on day 918 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 243 for 100. Bought on day 218 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 243 for 100. Bought on day 218 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 880 for 100. Bought on day 857 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 179 for 100. Bought on day 160 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 179 for 100. Bought on day 160 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 981 for 100. Bought on day 859 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 204 for 100. Bought on day 197 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 204 for 100. Bought on day 197 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 855 for 100. Bought on day 840 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 223 for 100. Bought on day 195 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 223 for 100. Bought on day 195 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 951 for 100. Bought on day 886 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 394 for 100. Bought on day 391 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 \text{ numDivide} = 511 \text{ numConquer} = 511
O(n): Sold on day 394 for 100. Bought on day 391 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 939 for 100. Bought on day 912 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 37 for 100. Bought on day 33 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 37 for 100. Bought on day 33 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 994 for 100. Bought on day 981 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
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O(nlogn): Sold on day 112 for 100. Bought on day 98 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 112 for 100. Bought on day 98 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 957 for 100. Bought on day 873 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 177 for 100. Bought on day 150 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 177 for 100. Bought on day 150 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 979 for 100. Bought on day 970 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 64 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 64 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 998 for 100. Bought on day 986 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 124 for 100. Bought on day 123 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 124 for 100. Bought on day 123 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 997 for 100. Bought on day 887 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 44 for 100. Bought on day 5 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 44 for 100. Bought on day 5 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 997 for 100. Bought on day 980 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 95 for 100. Bought on day 71 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 95 for 100. Bought on day 71 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 972 for 100. Bought on day 963 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 75 for 100. Bought on day 37 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 75 for 100. Bought on day 37 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 917 for 100. Bought on day 890 for 50. Profit = 100-50 = 50
```

```
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 50 for 100. Bought on day 1 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 50 for 100. Bought on day 1 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 975 for 100. Bought on day 967 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 43 for 100. Bought on day 33 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 43 for 100. Bought on day 33 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 968 for 100. Bought on day 964 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 98 for 100. Bought on day 92 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 98 for 100. Bought on day 92 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 833 for 100. Bought on day 828 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 21 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 21 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 937 for 100. Bought on day 855 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 58 for 100. Bought on day 41 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 58 for 100. Bought on day 41 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 977 for 100. Bought on day 975 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 310 for 100. Bought on day 269 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 310 for 100. Bought on day 269 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 961 for 100. Bought on day 940 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 240 for 100. Bought on day 172 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 240 for 100. Bought on day 172 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

```
O(n^2): Sold on day 941 for 100. Bought on day 901 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 117 for 100. Bought on day 116 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 117 for 100. Bought on day 116 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 993 for 100. Bought on day 974 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 55 for 100. Bought on day 51 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 55 for 100. Bought on day 51 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 985 for 100. Bought on day 893 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 79 for 100. Bought on day 60 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 79 for 100. Bought on day 60 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 945 for 100. Bought on day 892 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 62 for 100. Bought on day 45 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 62 for 100. Bought on day 45 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 978 for 100. Bought on day 886 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 144 for 100. Bought on day 130 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 144 for 100. Bought on day 130 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 996 for 100. Bought on day 965 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 209 for 100. Bought on day 141 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 209 for 100. Bought on day 141 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 923 for 100. Bought on day 892 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 39 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 39 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

```
--- Array length is 1000
O(n^2): Sold on day 952 for 100. Bought on day 864 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 64 for 100. Bought on day 26 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 64 for 100. Bought on day 26 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 951 for 100. Bought on day 926 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 35 for 100. Bought on day 33 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 35 for 100. Bought on day 33 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 888 for 100. Bought on day 883 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 90 for 100. Bought on day 56 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 90 for 100. Bought on day 56 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 998 for 100. Bought on day 996 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 84 for 100. Bought on day 19 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 84 for 100. Bought on day 19 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 909 for 100. Bought on day 898 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 60 for 100. Bought on day 28 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 60 for 100. Bought on day 28 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 999 for 100. Bought on day 998 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 204 for 100. Bought on day 100 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 204 for 100. Bought on day 100 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 974 for 100. Bought on day 939 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 135 for 100. Bought on day 133 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 135 for 100. Bought on day 133 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

--- Array length is 1000  $O(n^2)$ : Sold on day 983 for 100. Bought on day 874 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 53 for 100. Bought on day 45 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 53 for 100. Bought on day 45 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 995 for 100. Bought on day 849 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 119 for 100. Bought on day 109 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 119 for 100. Bought on day 109 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 940 for 100. Bought on day 933 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 45 for 100. Bought on day 38 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 45 for 100. Bought on day 38 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 . --- Array length is 1000  $O(n^2)$ : Sold on day 964 for 100. Bought on day 922 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 267 for 100. Bought on day 252 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 267 for 100. Bought on day 252 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 \_\_\_\_\_ --- Array length is 1000  $O(n^2)$ : Sold on day 892 for 100. Bought on day 879 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 298 for 100. Bought on day 271 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 298 for 100. Bought on day 271 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 -------- Array length is 1000  $O(n^2)$ : Sold on day 987 for 100. Bought on day 972 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 77 for 100. Bought on day 65 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 77 for 100. Bought on day 65 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 991 for 100. Bought on day 978 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 313 for 100. Bought on day 307 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 313 for 100. Bought on day 307 for 50. Profit = 100-50 = 50

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numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 975 for 100. Bought on day 962 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 112 for 100. Bought on day 65 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 112 for 100. Bought on day 65 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 987 for 100. Bought on day 972 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 97 for 100. Bought on day 64 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 97 for 100. Bought on day 64 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 999 for 100. Bought on day 965 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 95 for 100. Bought on day 29 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 95 for 100. Bought on day 29 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 987 for 100. Bought on day 966 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 240 for 100. Bought on day 236 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 240 for 100. Bought on day 236 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 953 for 100. Bought on day 944 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 243 for 100. Bought on day 232 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 243 for 100. Bought on day 232 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 935 for 100. Bought on day 895 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 294 for 100. Bought on day 270 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 294 for 100. Bought on day 270 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 997 for 100. Bought on day 954 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 94 for 100. Bought on day 24 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
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O(n): Sold on day 94 for 100. Bought on day 24 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 938 for 100. Bought on day 920 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 76 for 100. Bought on day 44 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 76 for 100. Bought on day 44 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 908 for 100. Bought on day 877 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 62 for 100. Bought on day 26 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 62 for 100. Bought on day 26 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 966 for 100. Bought on day 964 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 114 for 100. Bought on day 106 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 114 for 100. Bought on day 106 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 974 for 100. Bought on day 923 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 30 for 100. Bought on day 9 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 30 for 100. Bought on day 9 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 967 for 100. Bought on day 709 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 151 for 100. Bought on day 141 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 151 for 100. Bought on day 141 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 997 for 100. Bought on day 993 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 242 for 100. Bought on day 204 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 242 for 100. Bought on day 204 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 901 for 100. Bought on day 897 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 94 for 100. Bought on day 3 for 50. Profit = 100-50 = 50
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```
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 94 for 100. Bought on day 3 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 949 for 100. Bought on day 861 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 303 for 100. Bought on day 301 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 303 for 100. Bought on day 301 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 996 for 100. Bought on day 914 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 106 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 106 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 911 for 100. Bought on day 846 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 217 for 100. Bought on day 200 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 217 for 100. Bought on day 200 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 966 for 100. Bought on day 951 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 107 for 100. Bought on day 82 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 107 for 100. Bought on day 82 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 996 for 100. Bought on day 958 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 130 for 100. Bought on day 68 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 130 for 100. Bought on day 68 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 887 for 100. Bought on day 760 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 111 for 100. Bought on day 94 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 111 for 100. Bought on day 94 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 983 for 100. Bought on day 972 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
```

```
O(n\log n): Sold on day 58 for 100. Bought on day 42 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 58 for 100. Bought on day 42 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 990 for 100. Bought on day 983 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 231 for 100. Bought on day 203 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 231 for 100. Bought on day 203 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 942 for 100. Bought on day 933 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 122 for 100. Bought on day 112 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 122 for 100. Bought on day 112 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 992 for 100. Bought on day 910 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 30 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 30 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 996 for 100. Bought on day 972 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 68 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 68 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 996 for 100. Bought on day 965 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 25 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 25 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 857 for 100. Bought on day 775 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 116 for 100. Bought on day 96 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 116 for 100. Bought on day 96 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 983 for 100. Bought on day 968 for 50. Profit = 100-50 = 50
```

```
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 111 for 100. Bought on day 26 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 111 for 100. Bought on day 26 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 941 for 100. Bought on day 934 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 140 for 100. Bought on day 138 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 140 for 100. Bought on day 138 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 962 for 100. Bought on day 955 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 180 for 100. Bought on day 162 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 180 for 100. Bought on day 162 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 982 for 100. Bought on day 954 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 48 for 100. Bought on day 18 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 48 for 100. Bought on day 18 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 900 for 100. Bought on day 817 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 101 for 100. Bought on day 79 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 101 for 100. Bought on day 79 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 999 for 100. Bought on day 885 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 56 for 100. Bought on day 55 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 56 for 100. Bought on day 55 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 951 for 100. Bought on day 748 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 121 for 100. Bought on day 97 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 121 for 100. Bought on day 97 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

```
O(n^2): Sold on day 982 for 100. Bought on day 972 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 249 for 100. Bought on day 79 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 249 for 100. Bought on day 79 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 990 for 100. Bought on day 969 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 124 for 100. Bought on day 26 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 124 for 100. Bought on day 26 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 915 for 100. Bought on day 871 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 52 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 52 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 990 for 100. Bought on day 919 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 55 for 100. Bought on day 48 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 55 for 100. Bought on day 48 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 712 for 100. Bought on day 550 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 113 for 100. Bought on day 108 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 113 for 100. Bought on day 108 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 893 for 100. Bought on day 723 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 101 for 100. Bought on day 83 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 101 for 100. Bought on day 83 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 997 for 100. Bought on day 990 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 239 for 100. Bought on day 195 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 239 for 100. Bought on day 195 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
```

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--- Array length is 1000
O(n^2): Sold on day 983 for 100. Bought on day 970 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 6 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 6 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 999 for 100. Bought on day 937 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 172 for 100. Bought on day 145 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 172 for 100. Bought on day 145 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 965 for 100. Bought on day 861 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 33 for 100. Bought on day 26 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 33 for 100. Bought on day 26 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 896 for 100. Bought on day 815 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 98 for 100. Bought on day 45 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 98 for 100. Bought on day 45 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 958 for 100. Bought on day 926 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 41 for 100. Bought on day 29 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 41 for 100. Bought on day 29 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 958 for 100. Bought on day 950 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 218 for 100. Bought on day 188 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 218 for 100. Bought on day 188 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 984 for 100. Bought on day 950 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 67 for 100. Bought on day 45 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 67 for 100. Bought on day 45 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

--- Array length is 1000  $O(n^2)$ : Sold on day 974 for 100. Bought on day 826 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 24 for 100. Bought on day 20 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 24 for 100. Bought on day 20 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 982 for 100. Bought on day 951 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 104 for 100. Bought on day 91 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 104 for 100. Bought on day 91 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 878 for 100. Bought on day 827 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 135 for 100. Bought on day 87 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 135 for 100. Bought on day 87 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 . --- Array length is 1000  $O(n^2)$ : Sold on day 905 for 100. Bought on day 856 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 57 for 100. Bought on day 14 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 57 for 100. Bought on day 14 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 958 for 100. Bought on day 932 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 99 for 100. Bought on day 36 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 99 for 100. Bought on day 36 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 -------- Array length is 1000  $O(n^2)$ : Sold on day 880 for 100. Bought on day 786 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 152 for 100. Bought on day 140 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 152 for 100. Bought on day 140 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 952 for 100. Bought on day 938 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 54 for 100. Bought on day 29 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 54 for 100. Bought on day 29 for 50. Profit = 100-50 = 50

```
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 959 for 100. Bought on day 937 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 72 for 100. Bought on day 67 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 72 for 100. Bought on day 67 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 974 for 100. Bought on day 957 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 77 for 100. Bought on day 70 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 77 for 100. Bought on day 70 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 903 for 100. Bought on day 893 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 62 for 100. Bought on day 51 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 62 for 100. Bought on day 51 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 985 for 100. Bought on day 955 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 95 for 100. Bought on day 28 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 95 for 100. Bought on day 28 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 981 for 100. Bought on day 856 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 77 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 77 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 980 for 100. Bought on day 951 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 29 for 100. Bought on day 23 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 29 for 100. Bought on day 23 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 999 for 100. Bought on day 900 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 51 for 100. Bought on day 46 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
```

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O(n): Sold on day 51 for 100. Bought on day 46 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 976 for 100. Bought on day 921 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 203 for 100. Bought on day 103 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 203 for 100. Bought on day 103 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 902 for 100. Bought on day 781 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 77 for 100. Bought on day 42 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 77 for 100. Bought on day 42 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 960 for 100. Bought on day 942 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 111 for 100. Bought on day 106 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 111 for 100. Bought on day 106 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 971 for 100. Bought on day 893 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 58 for 100. Bought on day 14 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 58 for 100. Bought on day 14 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 960 for 100. Bought on day 923 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 50 for 100. Bought on day 41 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 50 for 100. Bought on day 41 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 885 for 100. Bought on day 881 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 66 for 100. Bought on day 16 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 66 for 100. Bought on day 16 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 947 for 100. Bought on day 878 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 61 for 100. Bought on day 58 for 50. Profit = 100-50 = 50
```

```
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 61 for 100. Bought on day 58 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 965 for 100. Bought on day 905 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 110 for 100. Bought on day 108 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 110 for 100. Bought on day 108 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 983 for 100. Bought on day 981 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 45 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 45 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 996 for 100. Bought on day 995 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 311 for 100. Bought on day 309 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 311 for 100. Bought on day 309 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 990 for 100. Bought on day 986 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 40 for 100. Bought on day 19 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 40 for 100. Bought on day 19 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 820 for 100. Bought on day 799 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 21 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 21 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 988 for 100. Bought on day 954 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 121 for 100. Bought on day 119 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 121 for 100. Bought on day 119 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 997 for 100. Bought on day 920 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
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O(nlogn): Sold on day 114 for 100. Bought on day 23 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 114 for 100. Bought on day 23 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 970 for 100. Bought on day 737 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 45 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 45 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 924 for 100. Bought on day 864 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 35 for 100. Bought on day 32 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 35 for 100. Bought on day 32 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 905 for 100. Bought on day 883 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 124 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 124 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 987 for 100. Bought on day 953 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 137 for 100. Bought on day 132 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 137 for 100. Bought on day 132 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 979 for 100. Bought on day 933 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 51 for 100. Bought on day 29 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 51 for 100. Bought on day 29 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 964 for 100. Bought on day 840 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 54 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 54 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 950 for 100. Bought on day 912 for 50. Profit = 100-50 = 50
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O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 99 for 100. Bought on day 97 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 99 for 100. Bought on day 97 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 989 for 100. Bought on day 907 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 110 for 100. Bought on day 67 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 110 for 100. Bought on day 67 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 919 for 100. Bought on day 724 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 38 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 38 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 905 for 100. Bought on day 896 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 44 for 100. Bought on day 42 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 44 for 100. Bought on day 42 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 907 for 100. Bought on day 836 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 59 for 100. Bought on day 24 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 59 for 100. Bought on day 24 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 998 for 100. Bought on day 990 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 171 for 100. Bought on day 161 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 171 for 100. Bought on day 161 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 974 for 100. Bought on day 959 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 34 for 100. Bought on day 30 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 34 for 100. Bought on day 30 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
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O(n^2): Sold on day 987 for 100. Bought on day 883 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 53 for 100. Bought on day 41 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 53 for 100. Bought on day 41 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 977 for 100. Bought on day 945 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 118 for 100. Bought on day 88 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 118 for 100. Bought on day 88 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 991 for 100. Bought on day 931 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 102 for 100. Bought on day 75 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 102 for 100. Bought on day 75 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 898 for 100. Bought on day 877 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 95 for 100. Bought on day 44 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 95 for 100. Bought on day 44 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 804 for 100. Bought on day 718 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 52 for 100. Bought on day 48 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 52 for 100. Bought on day 48 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 993 for 100. Bought on day 963 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 316 for 100. Bought on day 63 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 316 for 100. Bought on day 63 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 785 for 100. Bought on day 745 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 16 for 100. Bought on day 14 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 16 for 100. Bought on day 14 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
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--- Array length is 1000
O(n^2): Sold on day 924 for 100. Bought on day 909 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 26 for 100. Bought on day 19 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 26 for 100. Bought on day 19 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 986 for 100. Bought on day 984 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 20 for 100. Bought on day 7 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 20 for 100. Bought on day 7 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 991 for 100. Bought on day 975 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 10 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 10 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 927 for 100. Bought on day 915 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 109 for 100. Bought on day 22 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 109 for 100. Bought on day 22 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 990 for 100. Bought on day 882 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 61 for 100. Bought on day 58 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 61 for 100. Bought on day 58 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 963 for 100. Bought on day 955 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 203 for 100. Bought on day 141 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 203 for 100. Bought on day 141 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 977 for 100. Bought on day 946 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 47 for 100. Bought on day 27 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 47 for 100. Bought on day 27 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

--- Array length is 1000  $O(n^2)$ : Sold on day 997 for 100. Bought on day 956 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 51 for 100. Bought on day 42 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 51 for 100. Bought on day 42 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 998 for 100. Bought on day 948 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 206 for 100. Bought on day 179 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 206 for 100. Bought on day 179 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 951 for 100. Bought on day 937 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 103 for 100. Bought on day 57 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 103 for 100. Bought on day 57 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 . --- Array length is 1000  $O(n^2)$ : Sold on day 955 for 100. Bought on day 884 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 153 for 100. Bought on day 150 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 153 for 100. Bought on day 150 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 896 for 100. Bought on day 827 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 170 for 100. Bought on day 162 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 170 for 100. Bought on day 162 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 -------- Array length is 1000  $O(n^2)$ : Sold on day 908 for 100. Bought on day 812 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 62 for 100. Bought on day 54 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 62 for 100. Bought on day 54 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 972 for 100. Bought on day 904 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 88 for 100. Bought on day 81 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 88 for 100. Bought on day 81 for 50. Profit = 100-50 = 50

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numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 887 for 100. Bought on day 857 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 80 for 100. Bought on day 65 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 80 for 100. Bought on day 65 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 977 for 100. Bought on day 892 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 84 for 100. Bought on day 36 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 84 for 100. Bought on day 36 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 995 for 100. Bought on day 965 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 165 for 100. Bought on day 143 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 165 for 100. Bought on day 143 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 989 for 100. Bought on day 986 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 93 for 100. Bought on day 85 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 93 for 100. Bought on day 85 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 972 for 100. Bought on day 943 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 201 for 100. Bought on day 132 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 201 for 100. Bought on day 132 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 977 for 100. Bought on day 973 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 80 for 100. Bought on day 67 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 80 for 100. Bought on day 67 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 912 for 100. Bought on day 900 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 70 for 100. Bought on day 66 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
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O(n): Sold on day 70 for 100. Bought on day 66 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 951 for 100. Bought on day 942 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 118 for 100. Bought on day 115 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 118 for 100. Bought on day 115 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 886 for 100. Bought on day 773 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 38 for 100. Bought on day 9 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 38 for 100. Bought on day 9 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 964 for 100. Bought on day 914 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 84 for 100. Bought on day 79 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 84 for 100. Bought on day 79 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 921 for 100. Bought on day 630 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 65 for 100. Bought on day 30 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 65 for 100. Bought on day 30 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 901 for 100. Bought on day 897 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 46 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 46 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 986 for 100. Bought on day 920 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 95 for 100. Bought on day 90 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 95 for 100. Bought on day 90 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 862 for 100. Bought on day 848 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 91 for 100. Bought on day 24 for 50. Profit = 100-50 = 50
```

```
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 91 for 100. Bought on day 24 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 977 for 100. Bought on day 864 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 65 for 100. Bought on day 63 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 65 for 100. Bought on day 63 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 989 for 100. Bought on day 916 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 55 for 100. Bought on day 41 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 55 for 100. Bought on day 41 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 976 for 100. Bought on day 786 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 46 for 100. Bought on day 34 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 46 for 100. Bought on day 34 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 938 for 100. Bought on day 857 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 124 for 100. Bought on day 108 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 124 for 100. Bought on day 108 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 921 for 100. Bought on day 715 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 55 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 55 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 909 for 100. Bought on day 898 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 12 for 100. Bought on day 5 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 12 for 100. Bought on day 5 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 986 for 100. Bought on day 957 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
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O(nlogn): Sold on day 169 for 100. Bought on day 152 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 169 for 100. Bought on day 152 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 881 for 100. Bought on day 747 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 42 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 42 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 797 for 100. Bought on day 716 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 202 for 100. Bought on day 170 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 202 for 100. Bought on day 170 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 892 for 100. Bought on day 744 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 103 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 103 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 989 for 100. Bought on day 953 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 17 for 100. Bought on day 9 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 17 for 100. Bought on day 9 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 877 for 100. Bought on day 821 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 28 for 100. Bought on day 22 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 28 for 100. Bought on day 22 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 982 for 100. Bought on day 973 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 100 for 100. Bought on day 74 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 100 for 100. Bought on day 74 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 984 for 100. Bought on day 943 for 50. Profit = 100-50 = 50
```

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O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 22 for 100. Bought on day 16 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 22 for 100. Bought on day 16 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 933 for 100. Bought on day 864 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 332 for 100. Bought on day 327 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 332 for 100. Bought on day 327 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 928 for 100. Bought on day 913 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 82 for 100. Bought on day 81 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 82 for 100. Bought on day 81 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 995 for 100. Bought on day 964 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 33 for 100. Bought on day 20 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 33 for 100. Bought on day 20 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 994 for 100. Bought on day 978 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 55 for 100. Bought on day 6 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 55 for 100. Bought on day 6 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 872 for 100. Bought on day 857 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 165 for 100. Bought on day 152 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 165 for 100. Bought on day 152 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 952 for 100. Bought on day 950 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 112 for 100. Bought on day 82 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 112 for 100. Bought on day 82 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

```
O(n^2): Sold on day 960 for 100. Bought on day 933 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 30 for 100. Bought on day 6 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 30 for 100. Bought on day 6 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 985 for 100. Bought on day 911 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 248 for 100. Bought on day 233 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 248 for 100. Bought on day 233 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 866 for 100. Bought on day 799 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 105 for 100. Bought on day 59 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 105 for 100. Bought on day 59 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 975 for 100. Bought on day 932 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 40 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 40 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 907 for 100. Bought on day 844 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 41 for 100. Bought on day 39 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 41 for 100. Bought on day 39 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 940 for 100. Bought on day 901 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 27 for 100. Bought on day 25 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 27 for 100. Bought on day 25 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 908 for 100. Bought on day 831 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 110 for 100. Bought on day 57 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 110 for 100. Bought on day 57 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

```
--- Array length is 1000
O(n^2): Sold on day 931 for 100. Bought on day 915 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 249 for 100. Bought on day 239 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 249 for 100. Bought on day 239 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 996 for 100. Bought on day 937 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 98 for 100. Bought on day 86 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 98 for 100. Bought on day 86 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 887 for 100. Bought on day 880 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 186 for 100. Bought on day 166 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 186 for 100. Bought on day 166 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 997 for 100. Bought on day 978 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 62 for 100. Bought on day 57 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 62 for 100. Bought on day 57 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 984 for 100. Bought on day 875 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 173 for 100. Bought on day 170 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 173 for 100. Bought on day 170 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 921 for 100. Bought on day 904 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 44 for 100. Bought on day 33 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 44 for 100. Bought on day 33 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 998 for 100. Bought on day 800 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 205 for 100. Bought on day 204 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 205 for 100. Bought on day 204 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

--- Array length is 1000  $O(n^2)$ : Sold on day 955 for 100. Bought on day 870 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 235 for 100. Bought on day 190 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 235 for 100. Bought on day 190 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 968 for 100. Bought on day 740 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 27 for 100. Bought on day 18 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 27 for 100. Bought on day 18 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 958 for 100. Bought on day 927 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 121 for 100. Bought on day 115 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 121 for 100. Bought on day 115 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 . --- Array length is 1000  $O(n^2)$ : Sold on day 905 for 100. Bought on day 889 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 113 for 100. Bought on day 57 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 113 for 100. Bought on day 57 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 995 for 100. Bought on day 930 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 99 for 100. Bought on day 96 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 99 for 100. Bought on day 96 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 -------- Array length is 1000  $O(n^2)$ : Sold on day 961 for 100. Bought on day 837 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 91 for 100. Bought on day 61 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 91 for 100. Bought on day 61 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 970 for 100. Bought on day 920 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 69 for 100. Bought on day 17 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 69 for 100. Bought on day 17 for 50. Profit = 100-50 = 50

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numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 767 for 100. Bought on day 732 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 69 for 100. Bought on day 65 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 69 for 100. Bought on day 65 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 961 for 100. Bought on day 960 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 71 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 71 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 971 for 100. Bought on day 943 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 52 for 100. Bought on day 40 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 52 for 100. Bought on day 40 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 992 for 100. Bought on day 983 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 60 for 100. Bought on day 43 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 60 for 100. Bought on day 43 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 985 for 100. Bought on day 977 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 41 for 100. Bought on day 38 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 41 for 100. Bought on day 38 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 944 for 100. Bought on day 938 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 133 for 100. Bought on day 130 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 133 for 100. Bought on day 130 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 815 for 100. Bought on day 573 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 41 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
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O(n): Sold on day 41 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 993 for 100. Bought on day 940 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 91 for 100. Bought on day 79 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 91 for 100. Bought on day 79 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 914 for 100. Bought on day 838 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 114 for 100. Bought on day 102 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 114 for 100. Bought on day 102 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 980 for 100. Bought on day 920 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 57 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 57 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 973 for 100. Bought on day 941 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 170 for 100. Bought on day 129 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 170 for 100. Bought on day 129 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 774 for 100. Bought on day 745 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 120 for 100. Bought on day 117 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 120 for 100. Bought on day 117 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 831 for 100. Bought on day 824 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 47 for 100. Bought on day 39 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 47 for 100. Bought on day 39 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 988 for 100. Bought on day 966 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 185 for 100. Bought on day 175 for 50. Profit = 100-50 = 50
```

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O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 185 for 100. Bought on day 175 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 912 for 100. Bought on day 878 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 121 for 100. Bought on day 88 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 121 for 100. Bought on day 88 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 950 for 100. Bought on day 924 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 168 for 100. Bought on day 154 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 168 for 100. Bought on day 154 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 992 for 100. Bought on day 952 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 62 for 100. Bought on day 34 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 62 for 100. Bought on day 34 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 971 for 100. Bought on day 955 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 82 for 100. Bought on day 64 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 82 for 100. Bought on day 64 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 986 for 100. Bought on day 934 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 104 for 100. Bought on day 68 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 104 for 100. Bought on day 68 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 963 for 100. Bought on day 959 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 52 for 100. Bought on day 47 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 52 for 100. Bought on day 47 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 907 for 100. Bought on day 874 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
```

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O(n\log n): Sold on day 50 for 100. Bought on day 44 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 50 for 100. Bought on day 44 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 917 for 100. Bought on day 603 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 64 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 64 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 998 for 100. Bought on day 986 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 118 for 100. Bought on day 86 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 118 for 100. Bought on day 86 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 888 for 100. Bought on day 855 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 66 for 100. Bought on day 63 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 66 for 100. Bought on day 63 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 925 for 100. Bought on day 757 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 332 for 100. Bought on day 255 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 332 for 100. Bought on day 255 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 865 for 100. Bought on day 861 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 173 for 100. Bought on day 163 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 173 for 100. Bought on day 163 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 998 for 100. Bought on day 987 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 10 for 100. Bought on day 6 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 10 for 100. Bought on day 6 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 994 for 100. Bought on day 954 for 50. Profit = 100-50 = 50
```

```
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 132 for 100. Bought on day 34 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 132 for 100. Bought on day 34 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 885 for 100. Bought on day 872 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 375 for 100. Bought on day 274 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 375 for 100. Bought on day 274 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 962 for 100. Bought on day 914 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 55 for 100. Bought on day 40 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 55 for 100. Bought on day 40 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 869 for 100. Bought on day 827 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 5 for 100. Bought on day 1 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 5 for 100. Bought on day 1 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 987 for 100. Bought on day 958 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 57 for 100. Bought on day 53 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 57 for 100. Bought on day 53 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 997 for 100. Bought on day 953 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 263 for 100. Bought on day 262 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 263 for 100. Bought on day 262 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 827 for 100. Bought on day 809 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 45 for 100. Bought on day 3 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 45 for 100. Bought on day 3 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

```
O(n^2): Sold on day 978 for 100. Bought on day 921 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 92 for 100. Bought on day 79 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 92 for 100. Bought on day 79 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 997 for 100. Bought on day 996 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 17 for 100. Bought on day 9 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 17 for 100. Bought on day 9 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 993 for 100. Bought on day 954 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 41 for 100. Bought on day 32 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 41 for 100. Bought on day 32 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 956 for 100. Bought on day 776 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 58 for 100. Bought on day 18 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 58 for 100. Bought on day 18 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 995 for 100. Bought on day 984 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 12 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 12 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 968 for 100. Bought on day 947 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 13 for 100. Bought on day 12 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 13 for 100. Bought on day 12 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 988 for 100. Bought on day 980 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 153 for 100. Bought on day 138 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 153 for 100. Bought on day 138 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

```
--- Array length is 1000
O(n^2): Sold on day 969 for 100. Bought on day 947 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 41 for 100. Bought on day 15 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 41 for 100. Bought on day 15 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 937 for 100. Bought on day 821 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 112 for 100. Bought on day 37 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 112 for 100. Bought on day 37 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 783 for 100. Bought on day 766 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 215 for 100. Bought on day 206 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 215 for 100. Bought on day 206 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 993 for 100. Bought on day 967 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 229 for 100. Bought on day 138 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 229 for 100. Bought on day 138 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 993 for 100. Bought on day 969 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 77 for 100. Bought on day 68 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 77 for 100. Bought on day 68 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 868 for 100. Bought on day 784 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 117 for 100. Bought on day 65 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 117 for 100. Bought on day 65 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 954 for 100. Bought on day 863 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 60 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 60 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

--- Array length is 1000  $O(n^2)$ : Sold on day 973 for 100. Bought on day 957 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 55 for 100. Bought on day 49 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 55 for 100. Bought on day 49 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 836 for 100. Bought on day 828 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 41 for 100. Bought on day 29 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 41 for 100. Bought on day 29 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 944 for 100. Bought on day 865 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 121 for 100. Bought on day 104 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 121 for 100. Bought on day 104 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 . --- Array length is 1000  $O(n^2)$ : Sold on day 899 for 100. Bought on day 817 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 183 for 100. Bought on day 169 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511O(n): Sold on day 183 for 100. Bought on day 169 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 932 for 100. Bought on day 909 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 104 for 100. Bought on day 45 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 104 for 100. Bought on day 45 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 -------- Array length is 1000  $O(n^2)$ : Sold on day 978 for 100. Bought on day 927 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 228 for 100. Bought on day 33 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 228 for 100. Bought on day 33 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 961 for 100. Bought on day 875 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 67 for 100. Bought on day 30 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 67 for 100. Bought on day 30 for 50. Profit = 100-50 = 50

```
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 916 for 100. Bought on day 838 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 99 for 100. Bought on day 25 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 99 for 100. Bought on day 25 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 920 for 100. Bought on day 682 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 18 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 18 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 993 for 100. Bought on day 880 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 68 for 100. Bought on day 39 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 68 for 100. Bought on day 39 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 983 for 100. Bought on day 980 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 32 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 32 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 977 for 100. Bought on day 953 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 26 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 26 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 945 for 100. Bought on day 721 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 229 for 100. Bought on day 202 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 229 for 100. Bought on day 202 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 938 for 100. Bought on day 918 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 42 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
```

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O(n): Sold on day 42 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 988 for 100. Bought on day 966 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 30 for 100. Bought on day 22 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 30 for 100. Bought on day 22 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 978 for 100. Bought on day 925 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 361 for 100. Bought on day 257 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 361 for 100. Bought on day 257 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 987 for 100. Bought on day 976 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 48 for 100. Bought on day 40 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 48 for 100. Bought on day 40 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 928 for 100. Bought on day 921 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 58 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 58 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 981 for 100. Bought on day 963 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 9 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 9 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 907 for 100. Bought on day 897 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 150 for 100. Bought on day 141 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 150 for 100. Bought on day 141 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 990 for 100. Bought on day 934 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 89 for 100. Bought on day 66 for 50. Profit = 100-50 = 50
```

```
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 89 for 100. Bought on day 66 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 949 for 100. Bought on day 875 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 57 for 100. Bought on day 40 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 57 for 100. Bought on day 40 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 980 for 100. Bought on day 929 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 336 for 100. Bought on day 335 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 336 for 100. Bought on day 335 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 834 for 100. Bought on day 660 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 110 for 100. Bought on day 76 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 110 for 100. Bought on day 76 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 959 for 100. Bought on day 937 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 212 for 100. Bought on day 199 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 212 for 100. Bought on day 199 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 989 for 100. Bought on day 976 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 16 for 100. Bought on day 15 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 16 for 100. Bought on day 15 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 962 for 100. Bought on day 957 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 155 for 100. Bought on day 134 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 155 for 100. Bought on day 134 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 977 for 100. Bought on day 865 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
```

```
O(nlogn): Sold on day 191 for 100. Bought on day 123 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 191 for 100. Bought on day 123 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 943 for 100. Bought on day 926 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 246 for 100. Bought on day 129 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 246 for 100. Bought on day 129 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 980 for 100. Bought on day 935 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 230 for 100. Bought on day 224 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 230 for 100. Bought on day 224 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 830 for 100. Bought on day 722 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 50 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 50 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 880 for 100. Bought on day 749 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 213 for 100. Bought on day 146 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 213 for 100. Bought on day 146 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 960 for 100. Bought on day 950 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 499 for 100. Bought on day 445 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 499 for 100. Bought on day 445 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 975 for 100. Bought on day 967 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 227 for 100. Bought on day 178 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 227 for 100. Bought on day 178 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 832 for 100. Bought on day 732 for 50. Profit = 100-50 = 50
```

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O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 87 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 87 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 972 for 100. Bought on day 966 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 42 for 100. Bought on day 39 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 42 for 100. Bought on day 39 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 960 for 100. Bought on day 927 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 65 for 100. Bought on day 43 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 65 for 100. Bought on day 43 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 762 for 100. Bought on day 711 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 137 for 100. Bought on day 115 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 137 for 100. Bought on day 115 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 887 for 100. Bought on day 778 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 108 for 100. Bought on day 102 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 108 for 100. Bought on day 102 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 982 for 100. Bought on day 963 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 52 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 52 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 990 for 100. Bought on day 944 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 231 for 100. Bought on day 224 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 231 for 100. Bought on day 224 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

```
O(n^2): Sold on day 892 for 100. Bought on day 820 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 79 for 100. Bought on day 67 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 79 for 100. Bought on day 67 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 991 for 100. Bought on day 919 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 145 for 100. Bought on day 70 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 145 for 100. Bought on day 70 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 951 for 100. Bought on day 905 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 25 for 100. Bought on day 16 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 25 for 100. Bought on day 16 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 947 for 100. Bought on day 941 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 299 for 100. Bought on day 251 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 299 for 100. Bought on day 251 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 920 for 100. Bought on day 812 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 47 for 100. Bought on day 36 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 47 for 100. Bought on day 36 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 989 for 100. Bought on day 931 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 82 for 100. Bought on day 76 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 82 for 100. Bought on day 76 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 977 for 100. Bought on day 809 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 139 for 100. Bought on day 124 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 139 for 100. Bought on day 124 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

```
--- Array length is 1000
O(n^2): Sold on day 959 for 100. Bought on day 898 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 96 for 100. Bought on day 17 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 96 for 100. Bought on day 17 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 988 for 100. Bought on day 947 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 56 for 100. Bought on day 17 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 56 for 100. Bought on day 17 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 978 for 100. Bought on day 930 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 91 for 100. Bought on day 68 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 91 for 100. Bought on day 68 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 951 for 100. Bought on day 929 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 33 for 100. Bought on day 24 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 33 for 100. Bought on day 24 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 958 for 100. Bought on day 949 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 53 for 100. Bought on day 45 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 53 for 100. Bought on day 45 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Arrav length is 1000
O(n^2): Sold on day 874 for 100. Bought on day 704 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 49 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 49 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 938 for 100. Bought on day 774 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 170 for 100. Bought on day 147 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 170 for 100. Bought on day 147 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

--- Array length is 1000  $O(n^2)$ : Sold on day 994 for 100. Bought on day 959 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 58 for 100. Bought on day 33 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 58 for 100. Bought on day 33 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 961 for 100. Bought on day 956 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 293 for 100. Bought on day 283 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511O(n): Sold on day 293 for 100. Bought on day 283 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 966 for 100. Bought on day 951 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 111 for 100. Bought on day 37 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 111 for 100. Bought on day 37 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 . --- Array length is 1000  $O(n^2)$ : Sold on day 992 for 100. Bought on day 521 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 243 for 100. Bought on day 149 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 243 for 100. Bought on day 149 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 951 for 100. Bought on day 904 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 357 for 100. Bought on day 325 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 357 for 100. Bought on day 325 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 -------- Array length is 1000  $O(n^2)$ : Sold on day 965 for 100. Bought on day 909 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 117 for 100. Bought on day 104 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 117 for 100. Bought on day 104 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 992 for 100. Bought on day 912 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 13 for 100. Bought on day 7 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 13 for 100. Bought on day 7 for 50. Profit = 100-50 = 50

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numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 890 for 100. Bought on day 866 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 110 for 100. Bought on day 86 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 110 for 100. Bought on day 86 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 979 for 100. Bought on day 880 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 111 for 100. Bought on day 105 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 111 for 100. Bought on day 105 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 850 for 100. Bought on day 826 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 205 for 100. Bought on day 194 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 205 for 100. Bought on day 194 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 993 for 100. Bought on day 965 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 185 for 100. Bought on day 140 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 185 for 100. Bought on day 140 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 867 for 100. Bought on day 814 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 49 for 100. Bought on day 36 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 49 for 100. Bought on day 36 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 947 for 100. Bought on day 889 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 321 for 100. Bought on day 264 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 321 for 100. Bought on day 264 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 995 for 100. Bought on day 969 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 312 for 100. Bought on day 296 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
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O(n): Sold on day 312 for 100. Bought on day 296 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 959 for 100. Bought on day 930 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 151 for 100. Bought on day 137 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 151 for 100. Bought on day 137 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 964 for 100. Bought on day 918 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 23 for 100. Bought on day 3 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 23 for 100. Bought on day 3 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 984 for 100. Bought on day 947 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 50 for 100. Bought on day 3 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 50 for 100. Bought on day 3 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 937 for 100. Bought on day 910 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 215 for 100. Bought on day 206 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 215 for 100. Bought on day 206 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 998 for 100. Bought on day 959 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 39 for 100. Bought on day 23 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 39 for 100. Bought on day 23 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 910 for 100. Bought on day 893 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 94 for 100. Bought on day 91 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 94 for 100. Bought on day 91 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 986 for 100. Bought on day 980 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 163 for 100. Bought on day 126 for 50. Profit = 100-50 = 50
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O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 163 for 100. Bought on day 126 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 976 for 100. Bought on day 934 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 119 for 100. Bought on day 83 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 119 for 100. Bought on day 83 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 925 for 100. Bought on day 921 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 91 for 100. Bought on day 76 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 91 for 100. Bought on day 76 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 793 for 100. Bought on day 733 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 175 for 100. Bought on day 164 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 175 for 100. Bought on day 164 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 920 for 100. Bought on day 884 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 172 for 100. Bought on day 132 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 172 for 100. Bought on day 132 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 902 for 100. Bought on day 882 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 76 for 100. Bought on day 75 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 76 for 100. Bought on day 75 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 962 for 100. Bought on day 952 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 236 for 100. Bought on day 193 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 236 for 100. Bought on day 193 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 895 for 100. Bought on day 850 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
```

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O(n\log n): Sold on day 55 for 100. Bought on day 47 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 55 for 100. Bought on day 47 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 988 for 100. Bought on day 950 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 209 for 100. Bought on day 6 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 209 for 100. Bought on day 6 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 958 for 100. Bought on day 877 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 99 for 100. Bought on day 96 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 99 for 100. Bought on day 96 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 984 for 100. Bought on day 913 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 59 for 100. Bought on day 40 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 59 for 100. Bought on day 40 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 993 for 100. Bought on day 920 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 25 for 100. Bought on day 22 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 25 for 100. Bought on day 22 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 932 for 100. Bought on day 919 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 46 for 100. Bought on day 14 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 46 for 100. Bought on day 14 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 979 for 100. Bought on day 956 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 57 for 100. Bought on day 3 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 57 for 100. Bought on day 3 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 968 for 100. Bought on day 934 for 50. Profit = 100-50 = 50
```

```
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 89 for 100. Bought on day 75 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 89 for 100. Bought on day 75 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 936 for 100. Bought on day 903 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 50 for 100. Bought on day 3 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 50 for 100. Bought on day 3 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 998 for 100. Bought on day 995 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 154 for 100. Bought on day 144 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 154 for 100. Bought on day 144 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 934 for 100. Bought on day 899 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 50 for 100. Bought on day 23 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 50 for 100. Bought on day 23 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 978 for 100. Bought on day 745 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 127 for 100. Bought on day 104 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 127 for 100. Bought on day 104 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 985 for 100. Bought on day 909 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 51 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 51 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 956 for 100. Bought on day 951 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 142 for 100. Bought on day 23 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 142 for 100. Bought on day 23 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

```
O(n^2): Sold on day 964 for 100. Bought on day 899 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 117 for 100. Bought on day 28 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 117 for 100. Bought on day 28 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 993 for 100. Bought on day 990 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 75 for 100. Bought on day 73 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 75 for 100. Bought on day 73 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 982 for 100. Bought on day 948 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 231 for 100. Bought on day 211 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 231 for 100. Bought on day 211 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 871 for 100. Bought on day 850 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 5 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 5 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 982 for 100. Bought on day 889 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 59 for 100. Bought on day 55 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 59 for 100. Bought on day 55 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 884 for 100. Bought on day 866 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 84 for 100. Bought on day 74 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 84 for 100. Bought on day 74 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 976 for 100. Bought on day 956 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 99 for 100. Bought on day 46 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 99 for 100. Bought on day 46 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

```
--- Array length is 1000
O(n^2): Sold on day 959 for 100. Bought on day 916 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 42 for 100. Bought on day 37 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 42 for 100. Bought on day 37 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 916 for 100. Bought on day 908 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 92 for 100. Bought on day 83 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 92 for 100. Bought on day 83 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 941 for 100. Bought on day 935 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 46 for 100. Bought on day 37 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 46 for 100. Bought on day 37 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 853 for 100. Bought on day 832 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 78 for 100. Bought on day 69 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 78 for 100. Bought on day 69 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 995 for 100. Bought on day 977 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 127 for 100. Bought on day 113 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 127 for 100. Bought on day 113 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 960 for 100. Bought on day 931 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 111 for 100. Bought on day 72 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 111 for 100. Bought on day 72 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 961 for 100. Bought on day 932 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 116 for 100. Bought on day 68 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 116 for 100. Bought on day 68 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

--- Array length is 1000  $O(n^2)$ : Sold on day 978 for 100. Bought on day 924 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 16 for 100. Bought on day 14 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 16 for 100. Bought on day 14 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 982 for 100. Bought on day 860 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 107 for 100. Bought on day 102 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 107 for 100. Bought on day 102 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 950 for 100. Bought on day 936 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 30 for 100. Bought on day 1 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 30 for 100. Bought on day 1 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 . --- Array length is 1000  $O(n^2)$ : Sold on day 929 for 100. Bought on day 926 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 116 for 100. Bought on day 64 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 116 for 100. Bought on day 64 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 992 for 100. Bought on day 909 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 186 for 100. Bought on day 136 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 186 for 100. Bought on day 136 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 -------- Array length is 1000  $O(n^2)$ : Sold on day 964 for 100. Bought on day 931 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 29 for 100. Bought on day 11 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 29 for 100. Bought on day 11 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 972 for 100. Bought on day 965 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 219 for 100. Bought on day 78 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 219 for 100. Bought on day 78 for 50. Profit = 100-50 = 50

```
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 997 for 100. Bought on day 955 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 88 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 88 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 841 for 100. Bought on day 840 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 53 for 100. Bought on day 52 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 53 for 100. Bought on day 52 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 848 for 100. Bought on day 828 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 180 for 100. Bought on day 173 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 180 for 100. Bought on day 173 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 922 for 100. Bought on day 828 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 94 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 94 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 912 for 100. Bought on day 883 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 181 for 100. Bought on day 150 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 181 for 100. Bought on day 150 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 983 for 100. Bought on day 952 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 109 for 100. Bought on day 106 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 109 for 100. Bought on day 106 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 964 for 100. Bought on day 952 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 38 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
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O(n): Sold on day 38 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 930 for 100. Bought on day 856 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 154 for 100. Bought on day 150 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 154 for 100. Bought on day 150 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 984 for 100. Bought on day 976 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 20 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 20 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 985 for 100. Bought on day 768 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 116 for 100. Bought on day 74 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 116 for 100. Bought on day 74 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 982 for 100. Bought on day 954 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 27 for 100. Bought on day 17 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 27 for 100. Bought on day 17 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 993 for 100. Bought on day 968 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 35 for 100. Bought on day 24 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 35 for 100. Bought on day 24 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 991 for 100. Bought on day 985 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 213 for 100. Bought on day 174 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 213 for 100. Bought on day 174 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 944 for 100. Bought on day 934 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
```

 $O(n\log n)$ : Sold on day 29 for 100. Bought on day 2 for 50. Profit = 100-50 = 50

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O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 29 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 948 for 100. Bought on day 898 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 98 for 100. Bought on day 64 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 98 for 100. Bought on day 64 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 978 for 100. Bought on day 926 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 121 for 100. Bought on day 67 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 121 for 100. Bought on day 67 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 983 for 100. Bought on day 735 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 59 for 100. Bought on day 50 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 59 for 100. Bought on day 50 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 962 for 100. Bought on day 911 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 90 for 100. Bought on day 77 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 90 for 100. Bought on day 77 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 975 for 100. Bought on day 906 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 62 for 100. Bought on day 43 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 62 for 100. Bought on day 43 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 875 for 100. Bought on day 863 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 50 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 50 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 970 for 100. Bought on day 830 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
```

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O(nlogn): Sold on day 122 for 100. Bought on day 103 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 122 for 100. Bought on day 103 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 934 for 100. Bought on day 933 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 93 for 100. Bought on day 61 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 93 for 100. Bought on day 61 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 938 for 100. Bought on day 890 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 62 for 100. Bought on day 49 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 62 for 100. Bought on day 49 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 998 for 100. Bought on day 965 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 224 for 100. Bought on day 209 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 224 for 100. Bought on day 209 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 893 for 100. Bought on day 798 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 111 for 100. Bought on day 48 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 111 for 100. Bought on day 48 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 999 for 100. Bought on day 949 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 31 for 100. Bought on day 20 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 31 for 100. Bought on day 20 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 823 for 100. Bought on day 798 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 86 for 100. Bought on day 78 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 86 for 100. Bought on day 78 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 977 for 100. Bought on day 948 for 50. Profit = 100-50 = 50
```

```
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 35 for 100. Bought on day 27 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 35 for 100. Bought on day 27 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 961 for 100. Bought on day 891 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 156 for 100. Bought on day 92 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 156 for 100. Bought on day 92 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 972 for 100. Bought on day 748 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 166 for 100. Bought on day 162 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 166 for 100. Bought on day 162 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 990 for 100. Bought on day 938 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 42 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 42 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 929 for 100. Bought on day 907 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 181 for 100. Bought on day 169 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 181 for 100. Bought on day 169 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 966 for 100. Bought on day 965 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 210 for 100. Bought on day 74 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 210 for 100. Bought on day 74 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 999 for 100. Bought on day 935 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 20 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 20 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

```
O(n^2): Sold on day 918 for 100. Bought on day 905 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 29 for 100. Bought on day 24 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 29 for 100. Bought on day 24 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 964 for 100. Bought on day 956 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 128 for 100. Bought on day 125 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 128 for 100. Bought on day 125 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 968 for 100. Bought on day 822 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 50 for 100. Bought on day 26 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 50 for 100. Bought on day 26 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 995 for 100. Bought on day 959 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 34 for 100. Bought on day 28 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 34 for 100. Bought on day 28 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 986 for 100. Bought on day 978 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 133 for 100. Bought on day 39 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 133 for 100. Bought on day 39 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 930 for 100. Bought on day 909 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 48 for 100. Bought on day 38 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 48 for 100. Bought on day 38 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 873 for 100. Bought on day 841 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 15 for 100. Bought on day 14 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 15 for 100. Bought on day 14 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

```
--- Array length is 1000
O(n^2): Sold on day 987 for 100. Bought on day 913 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 47 for 100. Bought on day 5 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 47 for 100. Bought on day 5 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 902 for 100. Bought on day 890 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 77 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 77 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 965 for 100. Bought on day 844 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 93 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 93 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 889 for 100. Bought on day 884 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 135 for 100. Bought on day 125 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 135 for 100. Bought on day 125 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 872 for 100. Bought on day 675 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 215 for 100. Bought on day 214 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 215 for 100. Bought on day 214 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 940 for 100. Bought on day 929 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 69 for 100. Bought on day 1 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 69 for 100. Bought on day 1 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 995 for 100. Bought on day 962 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 95 for 100. Bought on day 94 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 95 for 100. Bought on day 94 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

--- Array length is 1000  $O(n^2)$ : Sold on day 904 for 100. Bought on day 859 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 342 for 100. Bought on day 310 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511O(n): Sold on day 342 for 100. Bought on day 310 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 999 for 100. Bought on day 942 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 245 for 100. Bought on day 241 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 245 for 100. Bought on day 241 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 994 for 100. Bought on day 870 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 62 for 100. Bought on day 43 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 62 for 100. Bought on day 43 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 . --- Array length is 1000  $O(n^2)$ : Sold on day 962 for 100. Bought on day 837 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 101 for 100. Bought on day 0 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 101 for 100. Bought on day 0 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 \_\_\_\_\_ --- Array length is 1000  $O(n^2)$ : Sold on day 999 for 100. Bought on day 967 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 90 for 100. Bought on day 39 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 90 for 100. Bought on day 39 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 -------- Array length is 1000  $O(n^2)$ : Sold on day 926 for 100. Bought on day 732 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 108 for 100. Bought on day 87 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 108 for 100. Bought on day 87 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 979 for 100. Bought on day 974 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 87 for 100. Bought on day 76 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 87 for 100. Bought on day 76 for 50. Profit = 100-50 = 50

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numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 916 for 100. Bought on day 806 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 96 for 100. Bought on day 84 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 96 for 100. Bought on day 84 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 987 for 100. Bought on day 932 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 236 for 100. Bought on day 189 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 236 for 100. Bought on day 189 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 958 for 100. Bought on day 873 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 97 for 100. Bought on day 34 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 97 for 100. Bought on day 34 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 938 for 100. Bought on day 871 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 171 for 100. Bought on day 159 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 171 for 100. Bought on day 159 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 936 for 100. Bought on day 861 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 110 for 100. Bought on day 108 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 110 for 100. Bought on day 108 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 983 for 100. Bought on day 975 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 246 for 100. Bought on day 178 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 246 for 100. Bought on day 178 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 988 for 100. Bought on day 982 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 98 for 100. Bought on day 87 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
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O(n): Sold on day 98 for 100. Bought on day 87 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 999 for 100. Bought on day 945 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 47 for 100. Bought on day 45 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 47 for 100. Bought on day 45 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 999 for 100. Bought on day 990 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 17 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 17 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 978 for 100. Bought on day 963 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 192 for 100. Bought on day 172 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 192 for 100. Bought on day 172 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 962 for 100. Bought on day 922 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 107 for 100. Bought on day 41 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 107 for 100. Bought on day 41 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 881 for 100. Bought on day 823 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 214 for 100. Bought on day 209 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 214 for 100. Bought on day 209 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 862 for 100. Bought on day 792 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 53 for 100. Bought on day 50 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 53 for 100. Bought on day 50 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 977 for 100. Bought on day 944 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 46 for 100. Bought on day 45 for 50. Profit = 100-50 = 50
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O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 46 for 100. Bought on day 45 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 979 for 100. Bought on day 941 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 122 for 100. Bought on day 36 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 122 for 100. Bought on day 36 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 960 for 100. Bought on day 948 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 7 for 100. Bought on day 6 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 7 for 100. Bought on day 6 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 946 for 100. Bought on day 935 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 41 for 100. Bought on day 32 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 41 for 100. Bought on day 32 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 997 for 100. Bought on day 960 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 203 for 100. Bought on day 180 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 203 for 100. Bought on day 180 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 991 for 100. Bought on day 984 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 111 for 100. Bought on day 51 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 111 for 100. Bought on day 51 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 887 for 100. Bought on day 845 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 168 for 100. Bought on day 134 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 168 for 100. Bought on day 134 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 993 for 100. Bought on day 962 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
```

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O(nlogn): Sold on day 224 for 100. Bought on day 223 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 224 for 100. Bought on day 223 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 974 for 100. Bought on day 972 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 179 for 100. Bought on day 48 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 179 for 100. Bought on day 48 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 991 for 100. Bought on day 859 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 12 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 12 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 995 for 100. Bought on day 985 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 91 for 100. Bought on day 23 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 91 for 100. Bought on day 23 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 972 for 100. Bought on day 930 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 55 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 55 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 960 for 100. Bought on day 951 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 51 for 100. Bought on day 29 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 51 for 100. Bought on day 29 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 622 for 100. Bought on day 605 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 124 for 100. Bought on day 100 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 124 for 100. Bought on day 100 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 925 for 100. Bought on day 853 for 50. Profit = 100-50 = 50
```

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O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 82 for 100. Bought on day 78 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 82 for 100. Bought on day 78 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 972 for 100. Bought on day 873 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 44 for 100. Bought on day 1 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 44 for 100. Bought on day 1 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 994 for 100. Bought on day 979 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 47 for 100. Bought on day 36 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 47 for 100. Bought on day 36 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 978 for 100. Bought on day 971 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 1 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 1 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 996 for 100. Bought on day 965 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 145 for 100. Bought on day 101 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 145 for 100. Bought on day 101 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 829 for 100. Bought on day 660 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 110 for 100. Bought on day 103 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 110 for 100. Bought on day 103 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 979 for 100. Bought on day 959 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 31 for 100. Bought on day 20 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 31 for 100. Bought on day 20 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

```
O(n^2): Sold on day 993 for 100. Bought on day 906 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 76 for 100. Bought on day 64 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 76 for 100. Bought on day 64 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 962 for 100. Bought on day 894 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 114 for 100. Bought on day 94 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 114 for 100. Bought on day 94 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 992 for 100. Bought on day 957 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 47 for 100. Bought on day 17 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 47 for 100. Bought on day 17 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 932 for 100. Bought on day 911 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 26 for 100. Bought on day 15 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 26 for 100. Bought on day 15 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 908 for 100. Bought on day 900 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 156 for 100. Bought on day 140 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 156 for 100. Bought on day 140 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 969 for 100. Bought on day 900 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 244 for 100. Bought on day 219 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 244 for 100. Bought on day 219 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 992 for 100. Bought on day 988 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 48 for 100. Bought on day 33 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 48 for 100. Bought on day 33 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

```
--- Array length is 1000
O(n^2): Sold on day 959 for 100. Bought on day 885 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 132 for 100. Bought on day 42 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 132 for 100. Bought on day 42 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 809 for 100. Bought on day 600 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 46 for 100. Bought on day 43 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 46 for 100. Bought on day 43 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 995 for 100. Bought on day 909 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 212 for 100. Bought on day 135 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 212 for 100. Bought on day 135 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 905 for 100. Bought on day 869 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 58 for 100. Bought on day 32 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 58 for 100. Bought on day 32 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 980 for 100. Bought on day 944 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 75 for 100. Bought on day 63 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 75 for 100. Bought on day 63 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 950 for 100. Bought on day 895 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 97 for 100. Bought on day 89 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 97 for 100. Bought on day 89 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 993 for 100. Bought on day 974 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 60 for 100. Bought on day 57 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 60 for 100. Bought on day 57 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

--- Array length is 1000  $O(n^2)$ : Sold on day 895 for 100. Bought on day 883 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 95 for 100. Bought on day 77 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 95 for 100. Bought on day 77 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 972 for 100. Bought on day 901 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 62 for 100. Bought on day 3 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 62 for 100. Bought on day 3 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 961 for 100. Bought on day 960 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 54 for 100. Bought on day 25 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 54 for 100. Bought on day 25 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 . --- Array length is 1000  $O(n^2)$ : Sold on day 944 for 100. Bought on day 885 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 103 for 100. Bought on day 97 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 103 for 100. Bought on day 97 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 \_\_\_\_\_ --- Array length is 1000  $O(n^2)$ : Sold on day 971 for 100. Bought on day 913 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 107 for 100. Bought on day 100 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 107 for 100. Bought on day 100 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 -------- Array length is 1000  $O(n^2)$ : Sold on day 853 for 100. Bought on day 775 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 110 for 100. Bought on day 8 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 110 for 100. Bought on day 8 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 975 for 100. Bought on day 932 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 46 for 100. Bought on day 20 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 46 for 100. Bought on day 20 for 50. Profit = 100-50 = 50

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numDivide = 511 numConquer = 511
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--- Array length is 1000
O(n^2): Sold on day 865 for 100. Bought on day 668 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 145 for 100. Bought on day 137 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 145 for 100. Bought on day 137 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 966 for 100. Bought on day 941 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 163 for 100. Bought on day 77 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 163 for 100. Bought on day 77 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 918 for 100. Bought on day 844 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 101 for 100. Bought on day 86 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 101 for 100. Bought on day 86 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 996 for 100. Bought on day 885 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 44 for 100. Bought on day 32 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 44 for 100. Bought on day 32 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 829 for 100. Bought on day 823 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 178 for 100. Bought on day 134 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 178 for 100. Bought on day 134 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 998 for 100. Bought on day 893 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 42 for 100. Bought on day 34 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 42 for 100. Bought on day 34 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
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--- Array length is 1000
O(n^2): Sold on day 961 for 100. Bought on day 941 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 53 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
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O(n): Sold on day 53 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 984 for 100. Bought on day 922 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 88 for 100. Bought on day 37 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 88 for 100. Bought on day 37 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 989 for 100. Bought on day 988 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 93 for 100. Bought on day 87 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 93 for 100. Bought on day 87 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 820 for 100. Bought on day 583 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 14 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 14 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 974 for 100. Bought on day 953 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 93 for 100. Bought on day 70 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 93 for 100. Bought on day 70 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 958 for 100. Bought on day 915 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 111 for 100. Bought on day 89 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 111 for 100. Bought on day 89 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 985 for 100. Bought on day 899 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 53 for 100. Bought on day 20 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 53 for 100. Bought on day 20 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
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--- Array length is 1000
O(n^2): Sold on day 905 for 100. Bought on day 787 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 121 for 100. Bought on day 97 for 50. Profit = 100-50 = 50
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O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 121 for 100. Bought on day 97 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 960 for 100. Bought on day 725 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 242 for 100. Bought on day 140 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 242 for 100. Bought on day 140 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 823 for 100. Bought on day 798 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 103 for 100. Bought on day 3 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 103 for 100. Bought on day 3 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 977 for 100. Bought on day 963 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 20 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 20 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 994 for 100. Bought on day 963 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 42 for 100. Bought on day 40 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 42 for 100. Bought on day 40 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 929 for 100. Bought on day 909 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 140 for 100. Bought on day 85 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 140 for 100. Bought on day 85 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 999 for 100. Bought on day 983 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 10 for 100. Bought on day 5 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 10 for 100. Bought on day 5 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 990 for 100. Bought on day 945 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
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O(nlogn): Sold on day 240 for 100. Bought on day 209 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 240 for 100. Bought on day 209 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 964 for 100. Bought on day 925 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 156 for 100. Bought on day 145 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 156 for 100. Bought on day 145 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 998 for 100. Bought on day 997 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 111 for 100. Bought on day 17 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 111 for 100. Bought on day 17 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 992 for 100. Bought on day 975 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 91 for 100. Bought on day 77 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 91 for 100. Bought on day 77 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 908 for 100. Bought on day 877 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 56 for 100. Bought on day 44 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 56 for 100. Bought on day 44 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 993 for 100. Bought on day 970 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 56 for 100. Bought on day 45 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 56 for 100. Bought on day 45 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 959 for 100. Bought on day 910 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 51 for 100. Bought on day 26 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 51 for 100. Bought on day 26 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 981 for 100. Bought on day 954 for 50. Profit = 100-50 = 50
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O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 69 for 100. Bought on day 67 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 69 for 100. Bought on day 67 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 996 for 100. Bought on day 986 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 55 for 100. Bought on day 14 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 55 for 100. Bought on day 14 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 975 for 100. Bought on day 938 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 100 for 100. Bought on day 93 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 100 for 100. Bought on day 93 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 985 for 100. Bought on day 967 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 52 for 100. Bought on day 41 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 52 for 100. Bought on day 41 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 828 for 100. Bought on day 820 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 86 for 100. Bought on day 58 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 86 for 100. Bought on day 58 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 971 for 100. Bought on day 950 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 21 for 100. Bought on day 16 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 21 for 100. Bought on day 16 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 998 for 100. Bought on day 980 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 236 for 100. Bought on day 195 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 236 for 100. Bought on day 195 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
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O(n^2): Sold on day 981 for 100. Bought on day 970 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 54 for 100. Bought on day 43 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 54 for 100. Bought on day 43 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 842 for 100. Bought on day 755 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 184 for 100. Bought on day 159 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 184 for 100. Bought on day 159 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 933 for 100. Bought on day 892 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 27 for 100. Bought on day 25 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 27 for 100. Bought on day 25 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 988 for 100. Bought on day 961 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 293 for 100. Bought on day 258 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 293 for 100. Bought on day 258 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 918 for 100. Bought on day 832 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 57 for 100. Bought on day 56 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 57 for 100. Bought on day 56 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 952 for 100. Bought on day 912 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 72 for 100. Bought on day 71 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 72 for 100. Bought on day 71 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 838 for 100. Bought on day 774 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 108 for 100. Bought on day 76 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 108 for 100. Bought on day 76 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

```
--- Array length is 1000
O(n^2): Sold on day 958 for 100. Bought on day 957 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 19 for 100. Bought on day 18 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 19 for 100. Bought on day 18 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 948 for 100. Bought on day 838 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 84 for 100. Bought on day 82 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 84 for 100. Bought on day 82 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 986 for 100. Bought on day 971 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 39 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 39 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 984 for 100. Bought on day 906 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 208 for 100. Bought on day 130 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 208 for 100. Bought on day 130 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 965 for 100. Bought on day 930 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 42 for 100. Bought on day 33 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 42 for 100. Bought on day 33 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Arrav length is 1000
O(n^2): Sold on day 987 for 100. Bought on day 770 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 135 for 100. Bought on day 82 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 135 for 100. Bought on day 82 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 943 for 100. Bought on day 935 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 193 for 100. Bought on day 192 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 193 for 100. Bought on day 192 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

--- Array length is 1000  $O(n^2)$ : Sold on day 990 for 100. Bought on day 959 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 90 for 100. Bought on day 77 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 90 for 100. Bought on day 77 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 998 for 100. Bought on day 965 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 84 for 100. Bought on day 13 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 84 for 100. Bought on day 13 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 845 for 100. Bought on day 828 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 101 for 100. Bought on day 98 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 101 for 100. Bought on day 98 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 . --- Array length is 1000  $O(n^2)$ : Sold on day 897 for 100. Bought on day 738 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 20 for 100. Bought on day 16 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 20 for 100. Bought on day 16 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 953 for 100. Bought on day 920 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 239 for 100. Bought on day 77 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 239 for 100. Bought on day 77 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 -------- Array length is 1000  $O(n^2)$ : Sold on day 913 for 100. Bought on day 896 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 248 for 100. Bought on day 220 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 248 for 100. Bought on day 220 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 955 for 100. Bought on day 918 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 149 for 100. Bought on day 125 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 149 for 100. Bought on day 125 for 50. Profit = 100-50 = 50

```
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 947 for 100. Bought on day 868 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 52 for 100. Bought on day 37 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 52 for 100. Bought on day 37 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 990 for 100. Bought on day 919 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 61 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 61 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 972 for 100. Bought on day 941 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 115 for 100. Bought on day 6 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 115 for 100. Bought on day 6 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 985 for 100. Bought on day 952 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 84 for 100. Bought on day 33 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 84 for 100. Bought on day 33 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 990 for 100. Bought on day 823 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 68 for 100. Bought on day 67 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 68 for 100. Bought on day 67 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 920 for 100. Bought on day 884 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 104 for 100. Bought on day 67 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 104 for 100. Bought on day 67 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 973 for 100. Bought on day 948 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 237 for 100. Bought on day 173 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
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O(n): Sold on day 237 for 100. Bought on day 173 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 969 for 100. Bought on day 960 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 39 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 39 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 853 for 100. Bought on day 852 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 178 for 100. Bought on day 129 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 178 for 100. Bought on day 129 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 972 for 100. Bought on day 839 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 17 for 100. Bought on day 7 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 17 for 100. Bought on day 7 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 992 for 100. Bought on day 899 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 115 for 100. Bought on day 103 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 115 for 100. Bought on day 103 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 939 for 100. Bought on day 928 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 60 for 100. Bought on day 48 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 60 for 100. Bought on day 48 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 952 for 100. Bought on day 911 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 90 for 100. Bought on day 86 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 90 for 100. Bought on day 86 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 997 for 100. Bought on day 972 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 74 for 100. Bought on day 67 for 50. Profit = 100-50 = 50
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O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 74 for 100. Bought on day 67 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 997 for 100. Bought on day 951 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 107 for 100. Bought on day 83 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 107 for 100. Bought on day 83 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 940 for 100. Bought on day 934 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 49 for 100. Bought on day 36 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 49 for 100. Bought on day 36 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 935 for 100. Bought on day 933 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 113 for 100. Bought on day 52 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 113 for 100. Bought on day 52 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 936 for 100. Bought on day 892 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 14 for 100. Bought on day 1 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 14 for 100. Bought on day 1 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 919 for 100. Bought on day 746 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 114 for 100. Bought on day 95 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 \text{ numDivide} = 511 \text{ numConquer} = 511
O(n): Sold on day 114 for 100. Bought on day 95 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 960 for 100. Bought on day 885 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 116 for 100. Bought on day 27 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 116 for 100. Bought on day 27 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 970 for 100. Bought on day 881 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
```

```
O(n\log n): Sold on day 44 for 100. Bought on day 43 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 44 for 100. Bought on day 43 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 981 for 100. Bought on day 972 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 60 for 100. Bought on day 22 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 60 for 100. Bought on day 22 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 964 for 100. Bought on day 822 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 114 for 100. Bought on day 22 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 114 for 100. Bought on day 22 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 863 for 100. Bought on day 852 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 53 for 100. Bought on day 41 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 53 for 100. Bought on day 41 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 933 for 100. Bought on day 919 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 72 for 100. Bought on day 71 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 72 for 100. Bought on day 71 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 899 for 100. Bought on day 897 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 124 for 100. Bought on day 101 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 124 for 100. Bought on day 101 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 901 for 100. Bought on day 847 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 228 for 100. Bought on day 209 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 228 for 100. Bought on day 209 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 938 for 100. Bought on day 890 for 50. Profit = 100-50 = 50
```

```
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 83 for 100. Bought on day 69 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 83 for 100. Bought on day 69 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 888 for 100. Bought on day 861 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 114 for 100. Bought on day 98 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 114 for 100. Bought on day 98 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 975 for 100. Bought on day 944 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 305 for 100. Bought on day 301 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 305 for 100. Bought on day 301 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 899 for 100. Bought on day 854 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 229 for 100. Bought on day 66 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 229 for 100. Bought on day 66 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 998 for 100. Bought on day 944 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 200 for 100. Bought on day 198 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 200 for 100. Bought on day 198 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 934 for 100. Bought on day 802 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 195 for 100. Bought on day 193 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 195 for 100. Bought on day 193 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 990 for 100. Bought on day 981 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 48 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 48 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

```
O(n^2): Sold on day 932 for 100. Bought on day 892 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 27 for 100. Bought on day 24 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 27 for 100. Bought on day 24 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 996 for 100. Bought on day 970 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 87 for 100. Bought on day 65 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 87 for 100. Bought on day 65 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 950 for 100. Bought on day 947 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 116 for 100. Bought on day 115 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 116 for 100. Bought on day 115 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 997 for 100. Bought on day 955 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 154 for 100. Bought on day 143 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 154 for 100. Bought on day 143 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 984 for 100. Bought on day 948 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 118 for 100. Bought on day 84 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 118 for 100. Bought on day 84 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 999 for 100. Bought on day 987 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 109 for 100. Bought on day 62 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 109 for 100. Bought on day 62 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 971 for 100. Bought on day 914 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 26 for 100. Bought on day 19 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 26 for 100. Bought on day 19 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
```

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--- Array length is 1000
O(n^2): Sold on day 958 for 100. Bought on day 853 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 17 for 100. Bought on day 12 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 17 for 100. Bought on day 12 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 985 for 100. Bought on day 938 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 171 for 100. Bought on day 133 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 171 for 100. Bought on day 133 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 984 for 100. Bought on day 950 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 187 for 100. Bought on day 150 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 187 for 100. Bought on day 150 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 900 for 100. Bought on day 898 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 51 for 100. Bought on day 6 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 51 for 100. Bought on day 6 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 992 for 100. Bought on day 973 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 58 for 100. Bought on day 56 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 58 for 100. Bought on day 56 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 831 for 100. Bought on day 823 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 150 for 100. Bought on day 133 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 150 for 100. Bought on day 133 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 910 for 100. Bought on day 812 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 124 for 100. Bought on day 118 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 124 for 100. Bought on day 118 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

--- Array length is 1000  $O(n^2)$ : Sold on day 963 for 100. Bought on day 877 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 169 for 100. Bought on day 160 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 169 for 100. Bought on day 160 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 963 for 100. Bought on day 910 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 153 for 100. Bought on day 126 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 153 for 100. Bought on day 126 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 972 for 100. Bought on day 943 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 120 for 100. Bought on day 18 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 120 for 100. Bought on day 18 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 . --- Array length is 1000  $O(n^2)$ : Sold on day 997 for 100. Bought on day 938 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 108 for 100. Bought on day 59 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 108 for 100. Bought on day 59 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 \_\_\_\_\_ --- Array length is 1000  $O(n^2)$ : Sold on day 986 for 100. Bought on day 953 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 185 for 100. Bought on day 24 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 185 for 100. Bought on day 24 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 -------- Array length is 1000  $O(n^2)$ : Sold on day 992 for 100. Bought on day 957 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 32 for 100. Bought on day 29 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 32 for 100. Bought on day 29 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 944 for 100. Bought on day 897 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 151 for 100. Bought on day 139 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 151 for 100. Bought on day 139 for 50. Profit = 100-50 = 50

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numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 980 for 100. Bought on day 967 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 120 for 100. Bought on day 96 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 120 for 100. Bought on day 96 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 944 for 100. Bought on day 913 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 19 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 19 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 979 for 100. Bought on day 910 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 58 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 58 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 889 for 100. Bought on day 864 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 2 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 2 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 947 for 100. Bought on day 946 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 111 for 100. Bought on day 89 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 111 for 100. Bought on day 89 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 907 for 100. Bought on day 900 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 365 for 100. Bought on day 361 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 365 for 100. Bought on day 361 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 989 for 100. Bought on day 911 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 91 for 100. Bought on day 71 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
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O(n): Sold on day 91 for 100. Bought on day 71 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 951 for 100. Bought on day 947 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 181 for 100. Bought on day 147 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 181 for 100. Bought on day 147 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 935 for 100. Bought on day 893 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 24 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 24 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 977 for 100. Bought on day 974 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 43 for 100. Bought on day 19 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 43 for 100. Bought on day 19 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 983 for 100. Bought on day 956 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 30 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 30 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 988 for 100. Bought on day 894 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 121 for 100. Bought on day 85 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 121 for 100. Bought on day 85 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 980 for 100. Bought on day 937 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 43 for 100. Bought on day 36 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 43 for 100. Bought on day 36 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 988 for 100. Bought on day 979 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 247 for 100. Bought on day 228 for 50. Profit = 100-50 = 50
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O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 247 for 100. Bought on day 228 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 998 for 100. Bought on day 967 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 70 for 100. Bought on day 60 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 70 for 100. Bought on day 60 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 928 for 100. Bought on day 883 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 235 for 100. Bought on day 106 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 235 for 100. Bought on day 106 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 913 for 100. Bought on day 855 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 84 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 84 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 987 for 100. Bought on day 978 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 111 for 100. Bought on day 82 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 111 for 100. Bought on day 82 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 942 for 100. Bought on day 920 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 94 for 100. Bought on day 47 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 94 for 100. Bought on day 47 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 906 for 100. Bought on day 872 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 78 for 100. Bought on day 67 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 78 for 100. Bought on day 67 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 997 for 100. Bought on day 948 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
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O(nlogn): Sold on day 110 for 100. Bought on day 75 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 110 for 100. Bought on day 75 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 983 for 100. Bought on day 914 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 85 for 100. Bought on day 39 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 85 for 100. Bought on day 39 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 961 for 100. Bought on day 957 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 262 for 100. Bought on day 259 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 262 for 100. Bought on day 259 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 972 for 100. Bought on day 968 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 91 for 100. Bought on day 88 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 91 for 100. Bought on day 88 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 987 for 100. Bought on day 966 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 39 for 100. Bought on day 34 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 39 for 100. Bought on day 34 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 853 for 100. Bought on day 794 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 98 for 100. Bought on day 61 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 98 for 100. Bought on day 61 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 981 for 100. Bought on day 948 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 123 for 100. Bought on day 43 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 123 for 100. Bought on day 43 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 992 for 100. Bought on day 987 for 50. Profit = 100-50 = 50
```

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O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 285 for 100. Bought on day 282 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 285 for 100. Bought on day 282 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 978 for 100. Bought on day 969 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 451 for 100. Bought on day 428 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 451 for 100. Bought on day 428 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 954 for 100. Bought on day 950 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 122 for 100. Bought on day 88 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 122 for 100. Bought on day 88 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 935 for 100. Bought on day 916 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 38 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 38 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 948 for 100. Bought on day 875 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 54 for 100. Bought on day 51 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 54 for 100. Bought on day 51 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 987 for 100. Bought on day 793 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 453 for 100. Bought on day 398 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 453 for 100. Bought on day 398 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 958 for 100. Bought on day 930 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 44 for 100. Bought on day 26 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 44 for 100. Bought on day 26 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

```
O(n^2): Sold on day 712 for 100. Bought on day 653 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 26 for 100. Bought on day 24 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 26 for 100. Bought on day 24 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 869 for 100. Bought on day 818 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 21 for 100. Bought on day 7 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 21 for 100. Bought on day 7 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 981 for 100. Bought on day 940 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 187 for 100. Bought on day 174 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 187 for 100. Bought on day 174 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 983 for 100. Bought on day 946 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 171 for 100. Bought on day 22 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 171 for 100. Bought on day 22 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 932 for 100. Bought on day 902 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 146 for 100. Bought on day 143 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 146 for 100. Bought on day 143 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 954 for 100. Bought on day 927 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 29 for 100. Bought on day 24 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 29 for 100. Bought on day 24 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 915 for 100. Bought on day 894 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 20 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 20 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

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--- Array length is 1000
O(n^2): Sold on day 948 for 100. Bought on day 907 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 47 for 100. Bought on day 45 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 47 for 100. Bought on day 45 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 987 for 100. Bought on day 823 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 184 for 100. Bought on day 183 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 184 for 100. Bought on day 183 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 800 for 100. Bought on day 746 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 101 for 100. Bought on day 74 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 101 for 100. Bought on day 74 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 981 for 100. Bought on day 904 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 233 for 100. Bought on day 223 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 233 for 100. Bought on day 223 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 949 for 100. Bought on day 911 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 217 for 100. Bought on day 19 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 217 for 100. Bought on day 19 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 993 for 100. Bought on day 948 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 235 for 100. Bought on day 143 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 235 for 100. Bought on day 143 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 979 for 100. Bought on day 887 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 54 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 54 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

--- Array length is 1000  $O(n^2)$ : Sold on day 855 for 100. Bought on day 803 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 65 for 100. Bought on day 63 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 65 for 100. Bought on day 63 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 872 for 100. Bought on day 866 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 477 for 100. Bought on day 84 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 477 for 100. Bought on day 84 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 993 for 100. Bought on day 984 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 122 for 100. Bought on day 74 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 122 for 100. Bought on day 74 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 . --- Array length is 1000  $O(n^2)$ : Sold on day 962 for 100. Bought on day 929 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 120 for 100. Bought on day 106 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 120 for 100. Bought on day 106 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 989 for 100. Bought on day 977 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 100 for 100. Bought on day 90 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 100 for 100. Bought on day 90 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 -------- Array length is 1000  $O(n^2)$ : Sold on day 887 for 100. Bought on day 879 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 175 for 100. Bought on day 90 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 175 for 100. Bought on day 90 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 978 for 100. Bought on day 898 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 61 for 100. Bought on day 6 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 61 for 100. Bought on day 6 for 50. Profit = 100-50 = 50

```
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 941 for 100. Bought on day 903 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 100 for 100. Bought on day 40 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 100 for 100. Bought on day 40 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 880 for 100. Bought on day 805 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 57 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 57 for 100. Bought on day 21 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 984 for 100. Bought on day 982 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 120 for 100. Bought on day 73 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 120 for 100. Bought on day 73 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 997 for 100. Bought on day 976 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 16 for 100. Bought on day 5 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 16 for 100. Bought on day 5 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 963 for 100. Bought on day 898 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 229 for 100. Bought on day 225 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 229 for 100. Bought on day 225 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 937 for 100. Bought on day 911 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 228 for 100. Bought on day 227 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 228 for 100. Bought on day 227 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 961 for 100. Bought on day 887 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 93 for 100. Bought on day 87 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
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O(n): Sold on day 93 for 100. Bought on day 87 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 967 for 100. Bought on day 953 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 94 for 100. Bought on day 89 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 94 for 100. Bought on day 89 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 894 for 100. Bought on day 866 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 460 for 100. Bought on day 147 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 460 for 100. Bought on day 147 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 973 for 100. Bought on day 958 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 31 for 100. Bought on day 30 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 31 for 100. Bought on day 30 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 984 for 100. Bought on day 958 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 99 for 100. Bought on day 73 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 99 for 100. Bought on day 73 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 995 for 100. Bought on day 932 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 100 for 100. Bought on day 93 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 100 for 100. Bought on day 93 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 997 for 100. Bought on day 943 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 78 for 100. Bought on day 64 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 78 for 100. Bought on day 64 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 980 for 100. Bought on day 925 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 235 for 100. Bought on day 231 for 50. Profit = 100-50 = 50
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```
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 235 for 100. Bought on day 231 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 957 for 100. Bought on day 894 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 281 for 100. Bought on day 276 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 281 for 100. Bought on day 276 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 950 for 100. Bought on day 900 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 112 for 100. Bought on day 91 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 112 for 100. Bought on day 91 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 766 for 100. Bought on day 751 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 146 for 100. Bought on day 134 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 146 for 100. Bought on day 134 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 984 for 100. Bought on day 977 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 45 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 45 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 969 for 100. Bought on day 949 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 81 for 100. Bought on day 79 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 81 for 100. Bought on day 79 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 958 for 100. Bought on day 910 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 118 for 100. Bought on day 9 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 118 for 100. Bought on day 9 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 925 for 100. Bought on day 855 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
```

```
O(n\log n): Sold on day 54 for 100. Bought on day 29 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 54 for 100. Bought on day 29 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 974 for 100. Bought on day 935 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 122 for 100. Bought on day 48 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 122 for 100. Bought on day 48 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 985 for 100. Bought on day 959 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 107 for 100. Bought on day 106 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 107 for 100. Bought on day 106 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 997 for 100. Bought on day 959 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 246 for 100. Bought on day 191 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 246 for 100. Bought on day 191 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 920 for 100. Bought on day 916 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 71 for 100. Bought on day 5 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 71 for 100. Bought on day 5 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 980 for 100. Bought on day 943 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 291 for 100. Bought on day 283 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 291 for 100. Bought on day 283 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 911 for 100. Bought on day 892 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 72 for 100. Bought on day 45 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 72 for 100. Bought on day 45 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 976 for 100. Bought on day 931 for 50. Profit = 100-50 = 50
```

```
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 61 for 100. Bought on day 55 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 61 for 100. Bought on day 55 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 932 for 100. Bought on day 876 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 137 for 100. Bought on day 135 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 137 for 100. Bought on day 135 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 988 for 100. Bought on day 909 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 174 for 100. Bought on day 93 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 174 for 100. Bought on day 93 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 954 for 100. Bought on day 948 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 11 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 11 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 971 for 100. Bought on day 905 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 19 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 19 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 998 for 100. Bought on day 938 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 96 for 100. Bought on day 48 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 96 for 100. Bought on day 48 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 969 for 100. Bought on day 961 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 36 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 36 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

```
O(n^2): Sold on day 968 for 100. Bought on day 917 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 210 for 100. Bought on day 173 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 210 for 100. Bought on day 173 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 991 for 100. Bought on day 914 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 54 for 100. Bought on day 33 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 54 for 100. Bought on day 33 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 998 for 100. Bought on day 993 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 19 for 100. Bought on day 16 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 19 for 100. Bought on day 16 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 988 for 100. Bought on day 952 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 57 for 100. Bought on day 55 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 57 for 100. Bought on day 55 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 932 for 100. Bought on day 869 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 108 for 100. Bought on day 18 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 108 for 100. Bought on day 18 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 979 for 100. Bought on day 915 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 187 for 100. Bought on day 137 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 187 for 100. Bought on day 137 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 928 for 100. Bought on day 899 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 121 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 121 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

```
--- Array length is 1000
O(n^2): Sold on day 942 for 100. Bought on day 877 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 237 for 100. Bought on day 126 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 237 for 100. Bought on day 126 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 933 for 100. Bought on day 839 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 239 for 100. Bought on day 218 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 239 for 100. Bought on day 218 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 912 for 100. Bought on day 876 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 46 for 100. Bought on day 36 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 46 for 100. Bought on day 36 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 843 for 100. Bought on day 804 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 183 for 100. Bought on day 172 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 183 for 100. Bought on day 172 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 965 for 100. Bought on day 920 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 183 for 100. Bought on day 95 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 183 for 100. Bought on day 95 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 930 for 100. Bought on day 768 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 29 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 29 for 100. Bought on day 0 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 975 for 100. Bought on day 959 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 176 for 100. Bought on day 157 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 176 for 100. Bought on day 157 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

--- Array length is 1000  $O(n^2)$ : Sold on day 960 for 100. Bought on day 915 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 140 for 100. Bought on day 131 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 140 for 100. Bought on day 131 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 965 for 100. Bought on day 946 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 56 for 100. Bought on day 32 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 56 for 100. Bought on day 32 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 860 for 100. Bought on day 827 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 192 for 100. Bought on day 131 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 192 for 100. Bought on day 131 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 . --- Array length is 1000  $O(n^2)$ : Sold on day 984 for 100. Bought on day 934 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 41 for 100. Bought on day 33 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 41 for 100. Bought on day 33 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 988 for 100. Bought on day 900 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 66 for 100. Bought on day 3 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 66 for 100. Bought on day 3 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 -------- Array length is 1000  $O(n^2)$ : Sold on day 983 for 100. Bought on day 927 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 187 for 100. Bought on day 131 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 187 for 100. Bought on day 131 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 929 for 100. Bought on day 914 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 111 for 100. Bought on day 96 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 111 for 100. Bought on day 96 for 50. Profit = 100-50 = 50

```
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 973 for 100. Bought on day 842 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 123 for 100. Bought on day 118 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 123 for 100. Bought on day 118 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 991 for 100. Bought on day 938 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 57 for 100. Bought on day 30 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 57 for 100. Bought on day 30 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 998 for 100. Bought on day 909 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 134 for 100. Bought on day 128 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 134 for 100. Bought on day 128 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 998 for 100. Bought on day 993 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 230 for 100. Bought on day 14 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 230 for 100. Bought on day 14 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 961 for 100. Bought on day 903 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 7 for 100. Bought on day 5 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 7 for 100. Bought on day 5 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 995 for 100. Bought on day 978 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 76 for 100. Bought on day 65 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 76 for 100. Bought on day 65 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 976 for 100. Bought on day 941 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 130 for 100. Bought on day 127 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
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O(n): Sold on day 130 for 100. Bought on day 127 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 995 for 100. Bought on day 938 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 164 for 100. Bought on day 163 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 164 for 100. Bought on day 163 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 961 for 100. Bought on day 840 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 77 for 100. Bought on day 75 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 77 for 100. Bought on day 75 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 957 for 100. Bought on day 885 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 57 for 100. Bought on day 49 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 57 for 100. Bought on day 49 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 855 for 100. Bought on day 847 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 23 for 100. Bought on day 20 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 23 for 100. Bought on day 20 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 974 for 100. Bought on day 966 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 23 for 100. Bought on day 12 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 23 for 100. Bought on day 12 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 831 for 100. Bought on day 828 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 179 for 100. Bought on day 144 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 179 for 100. Bought on day 144 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 984 for 100. Bought on day 903 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
```

O(nlogn): Sold on day 67 for 100. Bought on day 37 for 50. Profit = 100-50 = 50

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O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 67 for 100. Bought on day 37 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 992 for 100. Bought on day 871 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 111 for 100. Bought on day 66 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 111 for 100. Bought on day 66 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 968 for 100. Bought on day 946 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 248 for 100. Bought on day 87 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 248 for 100. Bought on day 87 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 986 for 100. Bought on day 860 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 100 for 100. Bought on day 41 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 \text{ numDivide} = 511 \text{ numConquer} = 511
O(n): Sold on day 100 for 100. Bought on day 41 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 806 for 100. Bought on day 802 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 326 for 100. Bought on day 314 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 326 for 100. Bought on day 314 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 995 for 100. Bought on day 817 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 29 for 100. Bought on day 23 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 29 for 100. Bought on day 23 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 980 for 100. Bought on day 938 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 78 for 100. Bought on day 74 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 78 for 100. Bought on day 74 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 995 for 100. Bought on day 918 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
```

```
O(n\log n): Sold on day 86 for 100. Bought on day 30 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 86 for 100. Bought on day 30 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 893 for 100. Bought on day 888 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 242 for 100. Bought on day 223 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 242 for 100. Bought on day 223 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 998 for 100. Bought on day 954 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 93 for 100. Bought on day 16 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 93 for 100. Bought on day 16 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 984 for 100. Bought on day 688 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 10 for 100. Bought on day 9 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 10 for 100. Bought on day 9 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 940 for 100. Bought on day 896 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 39 for 100. Bought on day 14 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 39 for 100. Bought on day 14 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 969 for 100. Bought on day 904 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 241 for 100. Bought on day 169 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 241 for 100. Bought on day 169 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 981 for 100. Bought on day 949 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 108 for 100. Bought on day 101 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 108 for 100. Bought on day 101 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
```

 $O(n^2)$ : Sold on day 949 for 100. Bought on day 917 for 50. Profit = 100-50 = 50

```
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 193 for 100. Bought on day 88 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 193 for 100. Bought on day 88 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 894 for 100. Bought on day 886 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 244 for 100. Bought on day 234 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 244 for 100. Bought on day 234 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 994 for 100. Bought on day 980 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 26 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 26 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 936 for 100. Bought on day 928 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 47 for 100. Bought on day 19 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 47 for 100. Bought on day 19 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 971 for 100. Bought on day 956 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 46 for 100. Bought on day 36 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 46 for 100. Bought on day 36 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 952 for 100. Bought on day 868 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 25 for 100. Bought on day 18 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 25 for 100. Bought on day 18 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 999 for 100. Bought on day 982 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 47 for 100. Bought on day 15 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 47 for 100. Bought on day 15 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

```
O(n^2): Sold on day 983 for 100. Bought on day 939 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 113 for 100. Bought on day 72 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 113 for 100. Bought on day 72 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 996 for 100. Bought on day 903 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 31 for 100. Bought on day 17 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 31 for 100. Bought on day 17 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 952 for 100. Bought on day 849 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 239 for 100. Bought on day 198 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 239 for 100. Bought on day 198 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 949 for 100. Bought on day 925 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 37 for 100. Bought on day 12 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 37 for 100. Bought on day 12 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 999 for 100. Bought on day 967 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 111 for 100. Bought on day 81 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 111 for 100. Bought on day 81 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 991 for 100. Bought on day 977 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 119 for 100. Bought on day 72 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 119 for 100. Bought on day 72 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 934 for 100. Bought on day 888 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 120 for 100. Bought on day 76 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 120 for 100. Bought on day 76 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

```
--- Array length is 1000
O(n^2): Sold on day 898 for 100. Bought on day 886 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 87 for 100. Bought on day 70 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 87 for 100. Bought on day 70 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 966 for 100. Bought on day 885 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 48 for 100. Bought on day 6 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 48 for 100. Bought on day 6 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 987 for 100. Bought on day 969 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 178 for 100. Bought on day 173 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 178 for 100. Bought on day 173 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 973 for 100. Bought on day 895 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 106 for 100. Bought on day 84 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 106 for 100. Bought on day 84 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 954 for 100. Bought on day 906 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 61 for 100. Bought on day 56 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 61 for 100. Bought on day 56 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 906 for 100. Bought on day 790 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 15 for 100. Bought on day 7 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 15 for 100. Bought on day 7 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 971 for 100. Bought on day 941 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 21 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 21 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

--- Array length is 1000  $O(n^2)$ : Sold on day 964 for 100. Bought on day 941 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 78 for 100. Bought on day 11 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 78 for 100. Bought on day 11 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 963 for 100. Bought on day 844 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 46 for 100. Bought on day 33 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 46 for 100. Bought on day 33 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 997 for 100. Bought on day 978 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 67 for 100. Bought on day 24 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 67 for 100. Bought on day 24 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 . --- Array length is 1000  $O(n^2)$ : Sold on day 988 for 100. Bought on day 969 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 76 for 100. Bought on day 71 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 76 for 100. Bought on day 71 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 923 for 100. Bought on day 884 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 70 for 100. Bought on day 48 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 70 for 100. Bought on day 48 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 -------- Array length is 1000  $O(n^2)$ : Sold on day 993 for 100. Bought on day 968 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 105 for 100. Bought on day 49 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 105 for 100. Bought on day 49 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 916 for 100. Bought on day 889 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 59 for 100. Bought on day 56 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 59 for 100. Bought on day 56 for 50. Profit = 100-50 = 50

```
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 993 for 100. Bought on day 963 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 81 for 100. Bought on day 45 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 81 for 100. Bought on day 45 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 965 for 100. Bought on day 894 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 111 for 100. Bought on day 43 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 111 for 100. Bought on day 43 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 901 for 100. Bought on day 813 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 26 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 26 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 972 for 100. Bought on day 910 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 18 for 100. Bought on day 17 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 18 for 100. Bought on day 17 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 999 for 100. Bought on day 982 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 225 for 100. Bought on day 149 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 225 for 100. Bought on day 149 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 922 for 100. Bought on day 849 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 23 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 23 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 987 for 100. Bought on day 984 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 100 for 100. Bought on day 92 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
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O(n): Sold on day 100 for 100. Bought on day 92 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 966 for 100. Bought on day 965 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 82 for 100. Bought on day 79 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 82 for 100. Bought on day 79 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 874 for 100. Bought on day 847 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 138 for 100. Bought on day 133 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 138 for 100. Bought on day 133 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 808 for 100. Bought on day 789 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 31 for 100. Bought on day 7 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 31 for 100. Bought on day 7 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 957 for 100. Bought on day 907 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 84 for 100. Bought on day 7 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 84 for 100. Bought on day 7 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 989 for 100. Bought on day 946 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 160 for 100. Bought on day 20 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 160 for 100. Bought on day 20 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 980 for 100. Bought on day 749 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 120 for 100. Bought on day 82 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 120 for 100. Bought on day 82 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 955 for 100. Bought on day 919 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 405 for 100. Bought on day 399 for 50. Profit = 100-50 = 50
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O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 405 for 100. Bought on day 399 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 999 for 100. Bought on day 979 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 92 for 100. Bought on day 63 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 92 for 100. Bought on day 63 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 968 for 100. Bought on day 914 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 13 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 13 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 895 for 100. Bought on day 796 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 236 for 100. Bought on day 157 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 236 for 100. Bought on day 157 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 980 for 100. Bought on day 972 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 37 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 37 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 981 for 100. Bought on day 861 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 222 for 100. Bought on day 127 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 222 for 100. Bought on day 127 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 980 for 100. Bought on day 905 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 18 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 18 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 949 for 100. Bought on day 922 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
```

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O(nlogn): Sold on day 174 for 100. Bought on day 135 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 174 for 100. Bought on day 135 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 937 for 100. Bought on day 915 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 31 for 100. Bought on day 27 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 31 for 100. Bought on day 27 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 936 for 100. Bought on day 849 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 119 for 100. Bought on day 111 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 119 for 100. Bought on day 111 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 994 for 100. Bought on day 983 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 80 for 100. Bought on day 71 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 80 for 100. Bought on day 71 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 910 for 100. Bought on day 878 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 238 for 100. Bought on day 203 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 238 for 100. Bought on day 203 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 998 for 100. Bought on day 973 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 155 for 100. Bought on day 130 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 155 for 100. Bought on day 130 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 946 for 100. Bought on day 939 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 36 for 100. Bought on day 33 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 36 for 100. Bought on day 33 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 992 for 100. Bought on day 980 for 50. Profit = 100-50 = 50
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O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 23 for 100. Bought on day 5 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 23 for 100. Bought on day 5 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 956 for 100. Bought on day 938 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 123 for 100. Bought on day 112 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 123 for 100. Bought on day 112 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 881 for 100. Bought on day 872 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 61 for 100. Bought on day 57 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 61 for 100. Bought on day 57 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 961 for 100. Bought on day 910 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 112 for 100. Bought on day 96 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 112 for 100. Bought on day 96 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 973 for 100. Bought on day 871 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 75 for 100. Bought on day 62 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 75 for 100. Bought on day 62 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 999 for 100. Bought on day 938 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 248 for 100. Bought on day 93 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 248 for 100. Bought on day 93 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 953 for 100. Bought on day 938 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 96 for 100. Bought on day 47 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 96 for 100. Bought on day 47 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

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O(n^2): Sold on day 938 for 100. Bought on day 865 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 102 for 100. Bought on day 94 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 102 for 100. Bought on day 94 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 907 for 100. Bought on day 898 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 105 for 100. Bought on day 60 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 105 for 100. Bought on day 60 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 966 for 100. Bought on day 769 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 123 for 100. Bought on day 97 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 123 for 100. Bought on day 97 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 905 for 100. Bought on day 897 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 7 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 7 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 966 for 100. Bought on day 848 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 60 for 100. Bought on day 52 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 60 for 100. Bought on day 52 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 989 for 100. Bought on day 911 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 497 for 100. Bought on day 323 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 497 for 100. Bought on day 323 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 986 for 100. Bought on day 958 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 43 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 43 for 100. Bought on day 35 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

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--- Array length is 1000
O(n^2): Sold on day 945 for 100. Bought on day 923 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 221 for 100. Bought on day 214 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 221 for 100. Bought on day 214 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 947 for 100. Bought on day 931 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 39 for 100. Bought on day 15 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 39 for 100. Bought on day 15 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 969 for 100. Bought on day 890 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 123 for 100. Bought on day 94 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 123 for 100. Bought on day 94 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 953 for 100. Bought on day 892 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 25 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 25 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 957 for 100. Bought on day 917 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 108 for 100. Bought on day 95 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 108 for 100. Bought on day 95 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 943 for 100. Bought on day 902 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 29 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 29 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 924 for 100. Bought on day 793 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 90 for 100. Bought on day 83 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 90 for 100. Bought on day 83 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

--- Array length is 1000  $O(n^2)$ : Sold on day 973 for 100. Bought on day 886 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 34 for 100. Bought on day 10 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 34 for 100. Bought on day 10 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 995 for 100. Bought on day 987 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 221 for 100. Bought on day 147 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511O(n): Sold on day 221 for 100. Bought on day 147 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 985 for 100. Bought on day 956 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 125 for 100. Bought on day 106 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 125 for 100. Bought on day 106 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 . --- Array length is 1000  $O(n^2)$ : Sold on day 972 for 100. Bought on day 953 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 118 for 100. Bought on day 114 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 118 for 100. Bought on day 114 for 50. Profit = 100-50 = 50 numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 990 for 100. Bought on day 951 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 16 for 100. Bought on day 13 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 16 for 100. Bought on day 13 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 -------- Array length is 1000  $O(n^2)$ : Sold on day 898 for 100. Bought on day 843 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$  $O(n\log n)$ : Sold on day 22 for 100. Bought on day 0 for 50. Profit = 100-50 = 50O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 22 for 100. Bought on day 0 for 50. Profit = 100-50 = 50numDivide = 511 numConquer = 511 --- Array length is 1000  $O(n^2)$ : Sold on day 898 for 100. Bought on day 871 for 50. Profit = 100-50 = 50  $O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500$ O(nlogn): Sold on day 202 for 100. Bought on day 161 for 50. Profit = 100-50 = 50 O(nlogn) = 9965 numDivide = 511 numConquer = 511 O(n): Sold on day 202 for 100. Bought on day 161 for 50. Profit = 100-50 = 50

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numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 938 for 100. Bought on day 931 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 17 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 17 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 984 for 100. Bought on day 952 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 62 for 100. Bought on day 44 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 62 for 100. Bought on day 44 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 991 for 100. Bought on day 920 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 35 for 100. Bought on day 32 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 35 for 100. Bought on day 32 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 942 for 100. Bought on day 863 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 50 for 100. Bought on day 3 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 50 for 100. Bought on day 3 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 974 for 100. Bought on day 943 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 53 for 100. Bought on day 52 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 53 for 100. Bought on day 52 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 966 for 100. Bought on day 941 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 122 for 100. Bought on day 116 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 122 for 100. Bought on day 116 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 958 for 100. Bought on day 935 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 97 for 100. Bought on day 71 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
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O(n): Sold on day 97 for 100. Bought on day 71 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 925 for 100. Bought on day 879 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 236 for 100. Bought on day 221 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 236 for 100. Bought on day 221 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 997 for 100. Bought on day 811 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 232 for 100. Bought on day 97 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 232 for 100. Bought on day 97 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 991 for 100. Bought on day 989 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 95 for 100. Bought on day 33 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 95 for 100. Bought on day 33 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 992 for 100. Bought on day 869 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 138 for 100. Bought on day 131 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 138 for 100. Bought on day 131 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 998 for 100. Bought on day 909 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 92 for 100. Bought on day 77 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 92 for 100. Bought on day 77 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 999 for 100. Bought on day 943 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 111 for 100. Bought on day 87 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 111 for 100. Bought on day 87 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 799 for 100. Bought on day 797 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
```

O(nlogn): Sold on day 236 for 100. Bought on day 201 for 50. Profit = 100-50 = 50

```
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 236 for 100. Bought on day 201 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 963 for 100. Bought on day 700 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 57 for 100. Bought on day 37 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 57 for 100. Bought on day 37 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 943 for 100. Bought on day 934 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 69 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 69 for 100. Bought on day 10 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 971 for 100. Bought on day 969 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 246 for 100. Bought on day 142 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 \text{ numDivide} = 511 \text{ numConquer} = 511
O(n): Sold on day 246 for 100. Bought on day 142 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 823 for 100. Bought on day 800 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 97 for 100. Bought on day 62 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 97 for 100. Bought on day 62 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 996 for 100. Bought on day 991 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 50 for 100. Bought on day 34 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 50 for 100. Bought on day 34 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 996 for 100. Bought on day 994 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 52 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 52 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 974 for 100. Bought on day 932 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
```

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O(nlogn): Sold on day 7 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 7 for 100. Bought on day 2 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 977 for 100. Bought on day 914 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 51 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 51 for 100. Bought on day 11 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 910 for 100. Bought on day 901 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 39 for 100. Bought on day 15 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 39 for 100. Bought on day 15 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 947 for 100. Bought on day 819 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 226 for 100. Bought on day 136 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 226 for 100. Bought on day 136 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 991 for 100. Bought on day 986 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 124 for 100. Bought on day 6 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 124 for 100. Bought on day 6 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 998 for 100. Bought on day 987 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 176 for 100. Bought on day 171 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 176 for 100. Bought on day 171 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 956 for 100. Bought on day 939 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 49 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 49 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 983 for 100. Bought on day 907 for 50. Profit = 100-50 = 50
```

```
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 219 for 100. Bought on day 218 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 219 for 100. Bought on day 218 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 951 for 100. Bought on day 906 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 92 for 100. Bought on day 31 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 92 for 100. Bought on day 31 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 920 for 100. Bought on day 821 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 182 for 100. Bought on day 175 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 182 for 100. Bought on day 175 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
.
--- Array length is 1000
O(n^2): Sold on day 943 for 100. Bought on day 890 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 46 for 100. Bought on day 40 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 46 for 100. Bought on day 40 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 923 for 100. Bought on day 795 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 96 for 100. Bought on day 64 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 96 for 100. Bought on day 64 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 994 for 100. Bought on day 957 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 51 for 100. Bought on day 43 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 51 for 100. Bought on day 43 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 996 for 100. Bought on day 929 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 52 for 100. Bought on day 18 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 52 for 100. Bought on day 18 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
```

```
O(n^2): Sold on day 992 for 100. Bought on day 973 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 109 for 100. Bought on day 78 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 109 for 100. Bought on day 78 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 949 for 100. Bought on day 880 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 81 for 100. Bought on day 76 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 81 for 100. Bought on day 76 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 994 for 100. Bought on day 946 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 180 for 100. Bought on day 175 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 180 for 100. Bought on day 175 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 772 for 100. Bought on day 759 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 62 for 100. Bought on day 49 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 62 for 100. Bought on day 49 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 979 for 100. Bought on day 974 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 18 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 18 for 100. Bought on day 8 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 987 for 100. Bought on day 981 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 57 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 57 for 100. Bought on day 13 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
______
--- Array length is 1000
O(n^2): Sold on day 953 for 100. Bought on day 946 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 113 for 100. Bought on day 106 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 113 for 100. Bought on day 106 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
```

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--- Array length is 1000
O(n^2): Sold on day 995 for 100. Bought on day 928 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 97 for 100. Bought on day 81 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 97 for 100. Bought on day 81 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 951 for 100. Bought on day 913 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 408 for 100. Bought on day 378 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 408 for 100. Bought on day 378 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
·
--- Array length is 1000
O(n^2): Sold on day 978 for 100. Bought on day 967 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 6 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 6 for 100. Bought on day 4 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
_____
--- Array length is 1000
O(n^2): Sold on day 945 for 100. Bought on day 922 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 82 for 100. Bought on day 32 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 82 for 100. Bought on day 32 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
-----
--- Array length is 1000
O(n^2): Sold on day 992 for 100. Bought on day 986 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(nlogn): Sold on day 45 for 100. Bought on day 38 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 45 for 100. Bought on day 38 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
--- Array length is 1000
O(n^2): Sold on day 987 for 100. Bought on day 926 for 50. Profit = 100-50 = 50
O(n^2) = 1000000 \text{ numDivide} = 499500 \text{ numConquer} = 499500
O(n\log n): Sold on day 57 for 100. Bought on day 44 for 50. Profit = 100-50 = 50
O(nlogn) = 9965 numDivide = 511 numConquer = 511
O(n): Sold on day 57 for 100. Bought on day 44 for 50. Profit = 100-50 = 50
numDivide = 511 numConquer = 511
All Stock1 tests passed. Now you can pass interviews
Stock1 problem ENDS
```