

Max Profit With K Transactions

You're given an array of positive integers representing the prices of a single stock on various days (each index in the array represents a different day). You're also given an integer k , which represents the number of transactions you're allowed to make. One transaction consists of buying the stock on a given day and selling it on another, later day.

Write a function that returns the maximum profit that you can make by buying and selling the stock, given k transactions.

Note that you can only hold one share of the stock at a time; in other words, you can't buy more than one share of the stock on any given day, and you can't buy a share of the stock if you're still holding another share. Also, you don't need to use all k transactions that you're allowed.

Sample Input prices = [5, 11, 3, 50, 60, 90] $k = 2$

Output

93 // Buy: 5, Sell: 11; Buy: 3, Sell: 90