Your are given an array of integers prices, for which the i-th element is the price of a given stock on day i; and a non-negative integer fee representing a transaction fee.

You may complete as many transactions as you like, but you need to pay the transaction fee for each transaction. You may not buy more than 1 share of a stock at a time (ie. you must sell the stock share before you buy again.)

Return the maximum profit you can make.

**Example 1:**

**Input:** prices = [1, 3, 2, 8, 4, 9], fee = 2

**Output:** 8

**Explanation:** The maximum profit can be achieved by:

 Buying at prices[0] = 1

 Selling at prices[3] = 8

 Buying at prices[4] = 4

 Selling at prices[5] = 9The total profit is ((8 - 1) - 2) + ((9 - 4) - 2) = 8.

**Note:**

 0 < prices.length <= 50000.

 0 < prices[i] < 50000.

 0 <= fee < 50000.