**Python Code:**

n = int(input(**'Enter the number of days: '**)) *# taking input number of days*a = [int(i) **for** i **in** input(**'Enter the values: '**).split(**' '**)] *# taking the price for each day*profit = 0 *# initial profit is 0*buy = **False** *# initially share is not bought***if** a[0] < a[1]: *# if the first price is lesser than the second one then buy the share* buy = **True** *# share is bought* profit = profit - a[0] *# cost of share is subtracted from the profit***for** j **in** range(1, len(a) - 1): *# iterating over non-end elements (neither start nor end)* **if** a[j] >= a[j + 1] **and** a[j] > a[j - 1] **and** buy:  
 *# if the share is bought and the current cost is a local maximum or starting of a local maximum then sell it* profit = profit + a[j]  
 buy = **False  
 elif** a[j] < a[j + 1] **and** a[j] <= a[j - 1] **and not** buy:  
 *# if the share is not bought and the current cost is a local minimum or ending of a local minimum then sell it* profit = profit - a[j]  
 buy = **True  
  
if** buy: *# if the share is bought by the end of all days then sell it on the last day* profit = profit + a[-1]  
 buy = **False**print(profit) *# print the output profit  
  
# if the above algorithm was too easy***'''  
If we plot a hraph for the prices against day, we observe that we buy at the beginning of a rising edge and sell at the beginning of a falling edge which gives the maximum profit. For maximum loss we shall buy at the start of a falling edge  
and sell at the end of it. Now difference of maximum attainable profit and maximum attainable loss shall be the difference of the ending and starting price (try drawing a graph and subtracting adjacent losses from profits). So we   
obtain the following relation and use it.  
'''**loss = profit + a[0] - a[-1]