# Max Array Sum ☆

**Problem** Submissions

Leaderboard

Editorial 🖰

Given an array of integers, find the subset of non-adjacent elements with the maximum sum. Calculate the sum of that subset.

For example, given an array arr = [-2, 1, 3, -4, 5] we have the following possible subsets:

Subset	Sun
[-2, 3, 5]	6
[-2, 3]	1
[-2, -4]	-6
[-2, 5]	3
[1, -4]	-3
[1, 5]	6
[3, 5]	8

Our maximum subset sum is 8.

#### **Function Description**

Complete the **maxSubsetSum** function in the editor below. It should return an integer representing the maximum subset sum for the given array. maxSubsetSum has the following parameter(s):

• arr: an array of integers

#### **Input Format**

The first line contains an integer, n.

The second line contains n space-separated integers arr[i]

#### Constraints

- $1 \le n \le 10^5$
- $-10^4 \le arr[i] \le 10^4$

# **Output Format**

Return the maximum sum described in the statement.

## Sample Input 0

5 3 7 4 6 5

## Sample Output 0

13

### **Explanation 0**

Our possible subsets are [3,4,5], [3,4], [3,6], [3,5], [7,6], [7,5] and [4,5]. The largest subset sum is 13 from subset [7,6]

## Sample Input 1

5 2 1 5 8 4

## Sample Output 1



Ü

```
Explanation 1

Our subsets are [2, 5, 4], [2, 5], [2, 8], [2, 4], [1, 8], [1, 4] and [5, 4]. The maximum subset sum is 11 from the first subset listed.

Sample Input 2

5
3 5 -7 8 10

Sample Output 2

15

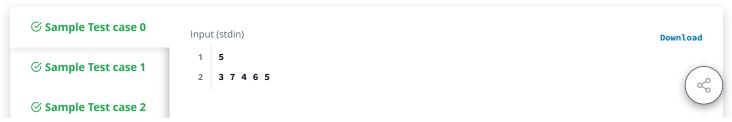
Explanation 2

Our subsets are [3, -7, 10], [3, 8], [3, 10], [5, 8], [5, 10] and [-7, 10]. The maximum subset sum is 15 from the fifth subset listed.
```



# **Congratulations!**

You have passed the sample test cases. Click the submit button to run your code against all the test cases.





Contest Calendar | Blog | Scoring | Environment | FAQ | About Us | Support | Careers | Terms Of Service | Privacy Policy | Request a Feature

