Max Array Sum

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     Sum
[-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

```
11
```

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.