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:

<table>
<thead>
<tr>
<th>Subset</th>
<th>Sum</th>
</tr>
</thead>
<tbody>
<tr>
<td>[-2, 3, 5]</td>
<td>6</td>
</tr>
<tr>
<td>[-2, 3]</td>
<td>1</td>
</tr>
<tr>
<td>[-2, -4]</td>
<td>-6</td>
</tr>
<tr>
<td>[-2, 5]</td>
<td>3</td>
</tr>
<tr>
<td>[1, -4]</td>
<td>-3</td>
</tr>
<tr>
<td>[1, 5]</td>
<td>6</td>
</tr>
<tr>
<td>[3, 5]</td>
<td>8</td>
</tr>
</tbody>
</table>

Our maximum subset sum is 8.

Function Description

Complete the \( \text{maxSubsetSum} \) function in the editor below. It should return an integer representing the maximum subset sum for the given array.

\( \text{maxSubsetSum} \) 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

- \( 1 \leq n \leq 10^5 \)
- \( -10^4 \leq arr[i] \leq 10^4 \)

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.