

Max is on a quest to collect gold coins. He has come across a series of open crates which are filled with gold coins each of varying quantities. He is free to collect the coins from any crate, however as soon as he collects the coins from one crate, the crates before and after that particular crate vanish, which means he can no longer collect the coins from both of those crates.

Given a series of  $N$  crates and  $C$  numbers of gold coins inside each of them, write a program to help Max collect the maximum number  $M$  of gold coins.

Read the input from STDIN (standard input) and write the output to STDOUT (standard output). Do not print any arbitrary strings while reading the input or printing the output as those would contribute to STDOUT.

Constraints:

I)  $0 < N < 104$

II)  $0 \leq C < 109$

I) The number of crates  $N$ , ...

II) Number of gold coins in each crate  $C$ ,  $0 \leq C \leq 109$

Input Format:

The first line of input contains  $N$ , the number of crates.

The second line of input contains  $N$  numbers separated by a single white space, representing the number of gold coins in each crate.

Output Format:

The output contains  $M$ , the maximum number of gold coins that Max can collect.

Sample Input1:

5

1 2 3 4 5

Sample Output1:

9

Explanation:

1 2 3 4 5

$N=5$ , The number of gold coins in each crate are: 1, 2, 3, 4 and 5.

If Max collects gold coins from 1st, 3rd and 5th crates, he will get 9 gold coins (1+3+5), which is the maximum

number of gold coins he can collect.

The other possible ways are:

1st and 3rd =  $1+3 = 4$

1st and 4th =  $1+4 = 5$

1st and 5th =  $1+5 = 6$

2nd and 4th =  $2+4 = 6$

2nd and 5th =  $2+5 = 7$

3rd and 5th =  $3+5 = 8$

As 9 is the maximum number of gold coins that Max can collect, 9 is the output.

Sample Input2:

6

2 14 5 4 32 8

Sample Output2:

46

Explanation:

2 14 5 4 32 8

N=6, The number of gold coins in each crate are: 2, 14, 5, 4, 32 and 8.

If Max collects gold coins from 2nd and 5th crates, he will get 46 gold coins (14+32), which is the maximum number of gold coins he can collect. Thus, 46 is the output.

### **SOLUTION:**

```
lst = []
```

```
n = int(input("Enter number of elements : "))
```

```
for i in range(0, n):
```

```
    ele = int(input())
```

```
        lst.append(ele)

print(lst)

lst1=0

lst2=0

for j in range(0,n,2):

    lst1+=lst[j]

for m in range(1,n,2):

    lst2+=lst[m]

if(lst1>=lst2):

    print(lst1)

else:

    print(lst2)
```

## OUTPUT:

```
Shell
Enter number of elements : 6
3
4
6
2
1
2
[3, 4, 6, 2, 1, 2]
10
> |
```