

# Filling Jugs

There are  $N$  jugs on a table and each jug has a capacity  $C_i$ .

Each jug will be filled with water such that the amount of water from Jug 1 to Jug N is in decreasing order. i.e. if Jug  $i$  has  $A_i$  amount of water in it then  $A_i \geq A_{i+1}$  for  $1 \leq i < N$ .

What is the maximum amount of water in total the can be poured in all the jugs?

## Input Format

The first line contains  $T$ , number of test cases. For each test case,

First line contains  $N$ , number of Jugs.

Second line contains  $N$  space seperated integers -  $C_i$ .

## Constraints

- $1 \leq T \leq 10$
- $1 \leq N \leq 10^5$
- $1 \leq C_i \leq 10^9$

## Output Format

For each test case print the maximum amount of water that can be poured in the jugs in a new line.

## Sample Input 0

```
2
4
10 4 7 3
5
1 2 3 4 5
```

## Sample Output 0

```
21
5
```

## Explanation 0

In the first test case, amount of water in each jug will be,

10 4 4 3

In the second test case it will be,

1 1 1 1 1

