# Speeds

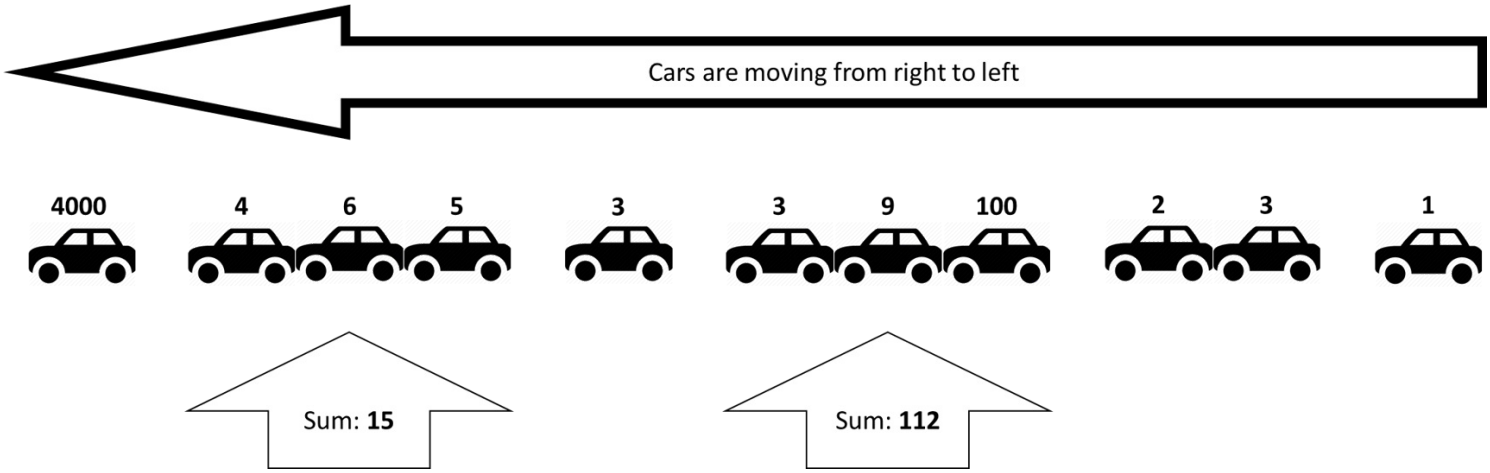
You are given a sequence of the speeds of cars in a single-lane street. A car can catch up to the car B, only if B is in front of A and the speed of A is greater than the speed of B, and then the speed of A is lowered to the speed of B. Each gathering of cars is called a group. Your task is to find the sum of the **initial speeds** of the **longest group** of cars (the group with most cars in it). If more than one group with equal length exists, then find the biggest sum of the initial speeds of these groups.

## Additional notes

- Cars cannot outrun each other
  - They can only catch up
- The street is very very long and no matter the speed
  - No car with any speed can get out of it until the end of the exam
- Cars with equal speeds do not catch up to each other
  - They do not form a group

## Example:

- There are two groups with the biggest length
  - `4 + 6 + 5 = 15`
  - `3 + 9 + 100 = 112`
- The answer is `112`




## Input

All input data is read from the standard input (the console)

- On the first line will be the number `C`
  - The number of cars
- On the next `C` lines there will a single integer number `S`
  - The speed of each car

## Output

The output data is printed on the standard output (the console)

- On the single line on the output print the **sum of the initial speeds of longest group** (the group with most cars)
  - If there are groups with equal length, print the biggest sum

# Constraints

- `C` will always be between `1` and `1000`
- Each `S` will always be between `1` and `1500`
- **The input data will always be correct and there is no need to check it explicitly**

# Sample Tests

## Input

```
11
1500
4
6
5
3
3
9
100
2
3
1
```

## Output

```
112
```

## Input

```
4
1
1
1
1
```

## Output

```
1
```

## Input

```
5
5
4
3
2
1
```

## Output

```
5
```

## Input

```
5
1
2
3
4
5
```

## Output

```
15
```