Number Building

Shor the Duck has an integer x. Initially, $x = 0$.

Shor may do the following operation any number of times.

Choose an integer i $(1 \leq i \leq 9)$. Pay C_i dollars to replace x with $10x + i$.

Takahashi has a budget of N yen.
Find the maximum possible value of the final x resulting from operations without exceeding the budget.

Input Format

The input consists of 2 lines.
The first line consists of one integer, N.
The next line consists of nine integers, C_1, C_2, C_3, ... C_8, C_9.

Output Format

Your program must print to standard output.

The output should consist of one line.
The first and only line should contain the largest integer you can create.

Subtasks

For all test cases, the input will satisfy the following bounds:

- $1 \leq N \leq 10^6$

- $1 \leq C_i \leq N$

Your program will be tested on input instances that satisfy the following restrictions:

Subtask	Marks	Additional Constraints
1	15	$N = 5$
2	10	C is non-increasing
3	75	No additional constraints

Sample Testcase 1

Input:

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

Output:

```
95
```

Explanation:

For example, the operations where $i=9$ and $i=5$ in this order change x as:

$0 \rightarrow 9 \rightarrow 95$.

The amount of money required for these operations is $C_9 + C_5 = 3+2 = 5$ dollars, which does not exceed the budget.

Since we can prove that we cannot make an integer greater than or equal to 96 without exceeding the budget, the answer is 95.

Sample Testcase 2

Input:

```
20
1 1 1 1 1 1 1 1 1
```

Output:

```
99999999999999999999
```

Explanation:

Note that the answer may not fit into a long long.