

02 : 04 : 54  
HRS MIN SEC

# August Easy '21

LIVE

Aug 07, 2021, 09:30 AM IST - Aug 07, 2021, 12:30 PM IST

INSTRUCTIONS

PROBLEMS

SUBMISSIONS

LEADERBOARD

ANALYTICS

JUDGE

[← Problems](#) / Divide the digits

## Divide the digits

Max. score: 100

You are given a number  $N$ .

You are required to form two numbers  $X$  and  $Y$  such that:

- The sum of frequency of each digit in  $X$  and  $Y$  is equal to frequency of that digit in  $N$ .
- The sum of numbers  $X$  and  $Y$  must be minimum.

Your task is to determine the minimum possible sum of  $X$  and  $Y$ .

### Input format

- The first line contains an integer  $T$  that denotes the number of test cases.
- For each test case:
  - The first line contains an integer  $N$ .

### Output format

For each test case, you are required to print the minimum possible sum of  $X$  and  $Y$  in a new line.

### Constraints

$$1 \leq T \leq 10^5$$

$$10 \leq N \leq 2 \times 10^{18}$$

#### SAMPLE INPUT



```
2
1321
42255
```

#### SAMPLE OUTPUT



25  
270

## Explanation

For the first test case:

- Minimum possible sum is **25**, which can be achieved if  $X = 12$ ,  $Y = 13$ .

For the second test case:

- Minimum possible sum is **270**, which can be achieved if  $X = 245$ ,  $Y = 25$ .

**Time Limit:** 1.0 sec(s) for each input file.

**Memory Limit:** 256 MB

**Source Limit:** 1024 KB

**Marking Scheme:** Score is assigned if any testcase passes.

**Allowed Languages:** Bash, C, C++, C++14, C++17, Clojure, C#, D, Erlang, F#, Go, Groovy, Haskell, Java, Java 8, Java 14, JavaScript(Rhino), JavaScript(Node.js), Julia, Kotlin, Lisp, Lisp (SBCL), Lua, Objective-C, OCaml, Octave, Pascal, Perl, PHP, Python, Python 3, Python 3.8, Racket, Ruby, Rust, Scala, Swift-4.1, Swift, TypeScript, Visual Basic

## CODE EDITOR

Save

C (gcc 5.4.0)



```
1  /*
2  // Sample code to perform I/O:
3  #include <stdio.h>
4
5  int main(){
6      int num;
7      scanf("%d", &num);           // Reading input from STDIN
8      printf("Input number is %d.\n", num); // Writing output to STDOUT
9  }
10
11 // Warning: Printing unwanted or ill-formatted data to output will cause
12 // the test cases to fail
13 */
14 // Write your code here
15
```

☒ Provide custom input

COMPILE & TEST

SUBMIT

 **Tip:** You can submit any number of times you want. Your best submission is considered for computing total score.

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