02 : 04 : 54
HRS MIN SEC

August Easy '21

LIVE

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

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)

```c
/*
// Sample code to perform I/O:
#include <stdio.h>

int main(){
    int num;
    scanf("%d", &num);                          // Reading input from ST
    printf("Input number is %d.\n", num);       // Writing output to STDOU
}

// Warning: Printing unwanted or ill-formatted data to output will cause the test cases to fail
*/

// Write your code here

```

1:1 vscode

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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