

INTELLECT LTD

Engineers working for *Intellect Ltd.* have proposed an innovative system to check the transfer of digital data. Only n -digit decimal numbers divisible by 11 are used during transfer. The system was implemented on a remote space station transferring data to Earth. Eventually, the mission control center received a message containing $(n+1)$ digits. The analysis indicated that the message had an extra spurious digit.

Write a program that will process the message and determine the number of ways to exclude a single digit so that the resulting number would be divisible by 11.

Limitations

$1 \leq n \leq 100\,000$.

Input

The first line of the input file defines the message length n .

The second line contains a decimal number having $n+1$ digits representing the message with an extra digit.

Output

The number of ways to exclude a single digit as described above.

Example

Nº	stdin	stdout
1	3 1352	2
2	2 222	3