

7997 Corrupted Gradebook

A gradebook has been corrupted so that the columns have been removed. Each student's record simply contains a single string of digits. Knowing that the string of digits must have come from G different assignments (each with a possible integer grade between 0 and 100, inclusive), parse the string so that the average of the G grades is maximized.

Input

The first line of input contains the number of test cases, C ($1 \leq C \leq 100$). Each of the following C lines contains an integer G ($1 \leq G \leq 25$) indicating the number of grades, followed by a string of digits containing the corrupted grades.

No grade other than 0 will start with the digit '0' (i.e. there are no leading zeros in any grade).

Output

For each test case, output a single line containing the maximum average grade possible.

Print out the average for the given grades, rounded to the nearest integer.

Sample Input

```
3
2 835
2 100
1 100
```

Sample Output

```
44
5
100
```