

Problem F. Sum of Numbers

Input file: `standard input`
Output file: `standard output`
Time limit: 1 second
Memory limit: 1024 megabytes

Given n digits from '1' to '9', you can add k '+' to turn it into an expression, find the minimum value of the expression.

Input

There are multiple test cases.

The first line of the input contains one integer T ($1 \leq T \leq 2 \times 10^4$) - the number of test cases.

For each test case,

The first line contains two integers n ($2 \leq n \leq 2 \times 10^5$) and k ($1 \leq k \leq 6$, $k < n$) - the number of digits and the number of '+'.
The second line contains a string of length n , which consists of digits from '1' to '9'.

The sum of n over all test cases does not exceed 2×10^5 .

Output

For each test case, output the answer in one line.

Example

standard input	standard output
2	9696
8 1	6
45455151	
2 1	
42	