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 ($1 \le T \le 2 \times 10^4$) - the number of test cases.

For each test case,

The first line contains two integers n ($2 \le n \le 2 \times 10^5$) and k ($1 \le k \le 6$, $k < n$) - 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 8 1 45455151 2 1 42	9696 6