AMERICAN COMPUTER SCIENCE LEAGUE

2018-2019 **Contest #1**

Intermediate Division - Digit Reassembly

PROBLEM: Given a number less than 10^{50} and a length *n*, find the sum of all the *n*-digit numbers (starting on the left) that are formed such that, after the first *n*-digit number is formed all others are formed by deleting the leading digit and taking the next *n*-digits.

EXAMPLE: Given 1325678905 2, the 2-digit numbers formed are 13, 32, 25, 56, 67, 78, 89, 90, and 05. The sum is 455.

INPUT: There will 5 lines of input. Each will contain a positive integer less than 10^{50} and a positive integer *n*.

OUTPUT: For each line of input, print the sum of the *n*-digit numbers formed.

SAMPLE INPUT

```
1325678905 2
54981230845791 5
4837261529387456 3
385018427388713440 4
623387770165388734 11
```

SAMPLE OUTPUT

1. 455
2. 489210
3. 7668
4. 75610
5. 471035012254