Q9: A Shadow Moves Across The Moon

In high-speed finance it is often necessary to compute the "moving average" of a series of *n* values. The moving average is computed from a smaller window of p<n values as shown below. Here given n = 6 values with a window of size p = 3, the computed moving average consisting of (n – p + 1) output values is shown in the second column.

Input	Output	*Explanation*
2.0		
1.4		
2.1	1.8	*(2.0 + 1.4 + 2.1)/3 = 5.5/3 = 1.8333 truncated to 1.8*
1.9	1.8	*(1.4 + 2.1 + 1.9)/3 = 5.4/3 = 1.8 truncated to 1.8*
1.8	1.9	*(2.1 + 1.9 + 1.8)/3 = 5.8/3 = 1.93333 truncated to 1.9*
0.7	1.4	*(1.9 + 1.8 + 0.7)/3 = 4.4/3 = 1.4666 truncated to 1.4*

Each input value is of the form `u.v` (where `u` and `v` are single digits in the range 0 – 9) and you will truncate the average to one digit of precision.

Input

The first line of input will be an integer on a line by itself representing the number of values, *n*. The second line of input will be an integer on a line by itself representing the size of the window, *p*. The next *n* lines of input will be floating point numbers of the form `u.v` where `u` and `v` are single digits in the range 0-9. You can be assured that $1 < p < n < 10$.

Output

Your output will be a list of (n – p + 1) values on individual lines of the form `u.v` where `u` and `v` are single digits in the range 0 – 9.

Sample Input and Output

Input	Output
5 2 1.0 2.0 3.0 4.0 5.0	1.5 2.5 3.5 4.5
4 3 1.3 1.9 4.5 2.2	2.5 2.8
5 3 9.0 7.4 2.6 4.3 4.5	6.3 4.7 3.8