



Problem CSEC Tutorial

Time Limit 1 second

Problem

In ASTU-CSEC club during the preparation days of final exam. Some initiative members provide tutorials for 2nd year students. Rapi is giving DLD course tutorial for the 2nd year students. There are N students they are a member of ASTU-CSEC club. The students can only invite at most K friends to attend the tutorial. All member students must attend, although the invited students are not obligated to attend. There are S seats available in the lab for the course. The course takes M minutes. If the number of attendant are exceeding the number of seats then the tutorial must be taken in Groups where each group takes M minutes to finish the tutorial. What is the possible minimum and maximum time taken for the lecturer Rapi to finish teaching the students?

Input

The input consist one line containing 4 inputs N , S , K , M representing the total number of members of ASTU-CSEC club, the number of seats, the maximum number of friends they can invite, maximum minutes to finish one group of students.

$1 \leq N \leq 100$ $1 \leq S \leq 1000$ $1 \leq K \leq 10$ $1 \leq M \leq 1000$

Output

Display the minimum and the maximum time taken for Rapi to finish teaching in minutes.

Sample Input 1	Sample Output 1
40 30 2 60	120 240