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The Virtual Learning Environment for Computer Programming

Multisets (4) P14098_en

Write a program that, given four natural numbers n, x, y and t, prints all the multisets with t numbers that can be made up with $\{1, \ldots, n\}$, in such a way that every number appears between x and y times.

Input

Input consists of a natural number n > 0, followed by a natural number $x \ge 0$, followed by a natural number y > x, followed by a natural number $t \ge 0$. Assume $nx \le t \le ny$.

Output

Print all the multisets of size t that can be made up with $\{1, ..., n\}$, using each number between x and y times. The numbers inside each multiset must appear in non-decreasing order

Information about the checker

You can print the solutions to this exercise in any order.

Sample input

3 1 4 6

Sample output

-	-
{1,2,3,3,3	, 3 }
{1,2,2,3,3	, 3 }
{1,2,2,2,3	, 3 }
{1,2,2,2,2	,3}
{1,1,2,3,3	,3}
{1,1,2,2,3	,3}
{1,1,2,2,2	,3}
{1,1,1,2,3	,3}
{1,1,1,2,2	,3}
{1,1,1,1,2	, 3 }

Problem information

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