

## Problem B. Hamiltonian Path

Input file: *standard input*  
Output file: *standard output*  
Time limit: 1 second  
Memory limit: 1024 mebibytes

You are given a directed graph of  $n$  vertices numbered from 0 to  $n - 1$ . You are also given two integers  $p$  and  $q$  such that  $1 \leq p, q \leq n$ .

The edges of the graph are constructed as follows: for every vertex  $i$ ,

- if  $i + p < n$ , then there is an edge from  $i$  to  $i + p$ ;
- if  $i - q \geq 0$ , then there is an edge from  $i$  to  $i - q$ .

Obviously, the graph has exactly  $(n - p) + (n - q)$  edges.

Find any Hamiltonian path in this graph, or determine that it does not exist.

Recall that a Hamiltonian path is a path that visits every vertex exactly once.

### Input

The first line of input contains an integer  $T$  ( $1 \leq T \leq 10^4$ ), the number of test cases.

Each test case consists of a single line containing three integers:  $n$ ,  $p$ , and  $q$  ( $1 \leq p, q \leq n \leq 10^6$ ).

It is guaranteed that the sum of  $n$  over all test cases does not exceed  $10^6$ .

### Output

For each test case, print a single line containing  $n$  integers that represent the order of vertices in a Hamiltonian path, or print  $-1$  if it does not exist.

If there are multiple solutions, print any one of them.

### Example

standard input	standard output
3	2 0 3 1 4
5 3 2	-1
8 2 4	0 5 10 3 8 1 6 11 4 9 2 7 12
13 5 7	