



3. The numbers in the table below are the result of executing an algorithm that has one parameter  $N$ , a non-negative integer, and produces sequences of integers as outputs. For values of  $N$  from 0 to 5, the algorithm produces the following sequences of numbers as outputs.

1 point

N	output
0	
1	0 1
2	0 2 2 3
3	0 2 4 3 4 5
4	0 2 4 6 4 5 6 7
5	0 2 4 6 8 5 6 7 8 9

Determine the algorithm that was used to generate the numbers in this table, and

1. Write it down.
2. Execute it for  $N = 6$ , and write down your result.
3. Give your description of the algorithm to a friend who is not a programmer, and ask him or her to execute it for  $N = 6$ .

What is the sequence of numbers for  $N = 6$ ? (Give your answer as integers separated by single spaces.)

0 2 4 6 8 10 6 7 8 9 10 11