Algorithm Practice

TOTAL POINTS 3

1. 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	0 2
1	3 5 7 9
2	6 8 10 12 14 16
3	9 11 13 15 17 19 21 23
4	12 14 16 18 20 22 24 26 28 30
5	15 17 19 21 23 25 27 29 31 33 35 37

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.)