1 Plants Grown and Amount of Water

A farmer does drip irrigation in his field and every plant in his field would consume 1ml of water every alternate day. On a fine day, he plants 'p' plants and sows 's' seeds in the field. The seeds are so special that they grow into plants two days. The farmer sows 's' seed every alternate day. Given the number of plants he planted on the first day, the number of seeds he sows every alternate day and the value of 'n', write a program to find the number of plants that would be in his field on nth day and the total amount of water consumed by his plants. For example, if he plants four plants, sows five seeds every alternate day then on the third day, there will be totally 9 plants in his field and the total water consumed will be 13 ml and on the seventh day there will be 19 plants and total water consumed will be 46 ml.

Input Format
First line contains the number of plants he planted, p
Next line contains the number of seeds he sow every alternate day, s
Next line contains the value of 'n'

Output Format
First line should contain the total number of plants in his field on nth day
Next line should contain the total quantity of water consumed by the plants in his field

Input/Output

Input	Output	
4 **5** **3**	**9** **13**	
4 **5** **7**	**19** **46**	

3 **10** **1000**	**4993** **1249000**	

2 Packing Water Bottles for a Resort

There is a resort 'ABC' in a hill station, during season time many tourist come and stay in the resort.
Everyday each resident of the resort is given a water bottle. From a mineral water plant, water bottles are packed in a cardboard box and sent to the resort.
As per the bookings done, during first 'm' days the number of tourists staying in the resort gets increased
and during the next 'n' days the number of tourists staying in the resort gets decreased.
The resort places the order to the mineral water plant well in advance.
There are two packaging machines M1 and M2 in the mineral water plant.
M1 is used for packing when the number of bottles are multiple of 5 and M2 is used for packing all number of bottles. The working speed of M1 is much faster than M2 and both the machines pack the bottles faster when they are given number of bottles in ascending order. Given the number of guests for the first 'm' and subsequent 'n' days, write a program to find the ordered list of number of bottles to be sent to M1 and M2 so that the packing can be done in minimum possible time.

For example, if the number of visitors for the first seven days is 12, 17, 20, 27, 29, 31, 35 and for the next six days the number of visitors in 30, 28, 25, 23, 16, 5 then the ordered list of bottles
to be packed given for M1 is 5, 20, 25, 30, 35 and for M2 it is 12, 16, 17, 23, 27, 28, 29, 31.

Input Format

First line contains the value of m

Next line contain 'm' values separated by a space

Next line contains the value of n

Next line contain the value of ‘n’ values separated by a space

Output Format

First line should contain the number of bottles to be packaged by M1 in order

Next line should contain the number of bottles to be packaged by M2 in order

Note:

There is a space at the end of both the lines in the expected output.

Input/Output

Input	Output	
7 **12 17 20 27 29 31 35** **6** **30 28 25 23 16 5**	**5 20 25 30 35** **12 16 17 23 27 28 29 31**	
10 **13 17 19 20 25 34 38 40 45 54** **10** **53 43 39 37 35 33 25 20 15 9**	**15 20 20 25 25 35 40 45** **9 13 17 19 33 34 37 38 39 43 53 54**	