Aircraft Seat Allocations:

An airline company has several planes of the same type. Each plane has a seating capacity of 24 with 3 rows and 8 seats in each row with split as shown below:

	а	b	С	d	е	f	g	h
1			[]			[]		
2			[]			[]		
3	[]		[]			[]		[]

If 4 seats are requested - allocate 4 seats in the middle of the first available row. Else 2 on the right and 2 on the left.

If 3 seats are requested - if the middle section of the first available row is empty, allocate there continuously. Else go to next row middle section.

If 2 seats are requested - Allocate the edge seats, 2 on the left or right.

If 1 seat is requested - then start from edge, and allocate the first available seat.

Examples:

INPUT	OUTPUT
4	1c 1d 1e 1f
3	2c 2d 2e
3	3c 3d 3e
2	1a 1b
2	1g 1h
4	2a 2b 2g 2h
1	2f