You have to solve the problem of office room arrangement.

You see we are thinking to arrange office room.
Office room is always noisy, and you are thinking to separate each room users as possible as you can so that they don’t feel uncomfortable.

If they are facing each other, we will add unhappy point as 1.

INPUT

What we can do here is based on given rooms and users, arrange room separately so people don’t feel uncomfortable.
[row, column, users] -> unhappy points

Example 1: [2, 3, 6]

user1	**user3**	**user5**
user2	**user4**	**user6**

*2 Rows, 3 Columns, 6 people

Example 2: [3, 3, 8]

user1	**user2**	**user3**
user4		**user5**
user6	**user7**	**user8**

*3 Rows, 3 Columns, 8 people

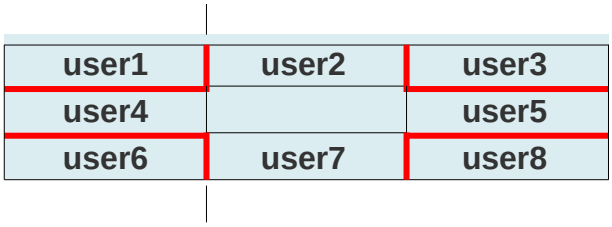
OUTPUT

Example 1: [2, 3, 6] **-> 7**

user1	**user3**	**user5**
user2	**user4**	**user6**

*2 Rows, 3 Columns, 6 people and 7 uncomfortable points

Example 2: [3, 3, 8] **-> 8**



*3 Rows, 3 Columns, 8 people and 8 uncomfortable points

TEST CASES

You can use this data to test your app that is works correct

[5,2,8]-> 7
[3,5,14]-> 18
[1,16,1]-> 0
[3,5,1]-> 0
[8,2,12]-> 10
[16,1,1]-> 0
[3,3,6]-> 3
[2,6,12]-> 16
[15,1,0]-> 0
[5,3,7]-> 0
[4,3,5]-> 0
[3,5,11]-> 8
[7,2,13]-> 16
[15,1,6]-> 0
[15,1,15]-> 14
[4,4,9]-> 2
[5,3,8]-> 0
[3,5,6]-> 0
[16,1,7]-> 0
[1,15,7]-> 0
[4,3,12]-> 17
[5,3,13]-> 14
[2,4,5]-> 2
[5,3,5]-> 0
[16,1,16]-> 15
[2,5,8]-> 7
[5,3,4]-> 0
[5,3,10]-> 6
[4,4,7]-> 0
[3,5,9]-> 3
[4,2,2]-> 0
[4,4,15]-> 20
[2,2,4]-> 4
[5,3,11]-> 8
[4,4,8]-> 0
[1,16,9]-> 1
[4,4,16]-> 24
[1,15,6]-> 0
[15,1,8]-> 0
[5,3,6]-> 0
[16,1,9]-> 1
[3,5,15]-> 22
[1,15,1]-> 0
[1,15,0]-> 0

[2,5,9]-> 10
[3,5,10]-> 6
[1,15,15]-> 14
[3,2,0]-> 0
[5,3,2]-> 0
[5,3,1]-> 0
[5,2,4]-> 0
[3,5,4]-> 0
[2,7,13]-> 16
[3,3,0]-> 0
[7,2,11]-> 10
[4,4,0]-> 0
[1,1,0]-> 0
[2,6,9]-> 7
[3,5,3]-> 0
[5,3,15]-> 22
[5,2,6]-> 2
[3,4,12]-> 17
[2,3,6]-> 7
[1,1,1]-> 0
[15,1,1]-> 0
[1,16,16]-> 15
[2,2,2]-> 0
[3,3,9]-> 12
[16,1,8]-> 0
[9,1,6]-> 2
[5,3,12]-> 11
[2,2,3]-> 2
[3,5,7]-> 0
[7,2,0]-> 0
[4,3,6]-> 0
[2,3,4]-> 2
[1,15,8]-> 0
[16,1,0]-> 0
[5,3,9]-> 3
[15,1,7]-> 0
[2,4,6]-> 4
[1,16,7]-> 0
[3,5,12]-> 11
[1,16,8]-> 0
[4,4,1]-> 0
[3,5,0]-> 0
[3,5,8]-> 0
[1,16,0]-> 0
[5,3,3]-> 0
[5,3,0]-> 0
[1,13,9]-> 4
[3,5,2]-> 0
[1,9,6]-> 2
[6,2,12]-> 16
[4,3,8]-> 4
[3,5,5]-> 0
[5,3,14]-> 18
[4,3,7]-> 2
[6,2,4]-> 0
[3,5,1]-> 0