

Sum

Jojo is in class right now and feels bored, so he wants to do something. Lili suggests him to make a program to loop from 1 to N and print their sum. Jojo thinks that it is too easy, so he wants to add more challenge, he will only print the sum if it is more than X, then he will subtract the number by M until it is not greater than X.

Format Input

The first line will consist an integer T, the number of test cases.

Each test case will contain three numbers N, X, and M.

Format Output

For each test case, print "Case #X:", then the sum if it fulfills the condition above, each on their own line.

Constraints

1 <= T <= 10

1 <= N <= 10^5

1 <= X <= 10^9

1 <= M <= 10^9

Sample Input	Sample Output
3	Case #1:
7 10 10	15
7 8 2	11
10 10 8	Case #2:
	10
	13
	13
	14
	Case #3:
	15
	13
	12
	12
	13
	15

Note

Case 1:

Before the loop, the sum is 0.

From 1st to 4th loop, the values of the sum are 1, 3, 6, and 10. Since they are not greater than 10, we will not print them.

On the 5th loop, the sum is 15. 15 is greater than 10, so print 15, then subtract with 10 until it is not greater than 10. the final value will be 5.

On the 6th loop, the sum is 11. 11 is greater than 10, so print 11, then subtract with 10 until it is not greater than 10. the final value will be 1.



On the 7th loop, the sum is 8.

Case 2:

Before the loop, the sum is 0.

From 1st to 3rd loop, the values of the sum are 1, 3, and 6. Since they are not greater than 8, we will not print them.

On the 4th loop, the sum is 10. 10 is greater than 8, so print 10, then subtract with 2 until it is not greater than 8. the final value will be 8.

On the 5th loop, the sum is 13. 13 is greater than 8, so print 13, then subtract with 2 until it is not greater than 8. the final value will be 7.

Do the same thing on the 6th and 7th loop.