Java Loops



Problem Statement

In this problem you will test your knowledge of Java loops. Given three integers a, b, and n, output the following series:

$$a + 2^{0}b, a + 2^{0}b + 2^{1}b, \dots, a + 2^{0}b + 2^{1}b + \dots + 2^{n-1}b$$

Input Format

The first line will contain the number of testcases t. Each of the next t lines will have three integers, a, b, and n.

Constraints:

$$0 \le a, b \le 50$$
$$1 \le n \le 15$$

Output Format

Print the answer to each test case in separate lines.

Sample Input

Sample Output

2 6 14 30 62 126 254 510 1022 2046 8 14 26 50 98

Explanation

In the first case:

1st term=0+1*2=2 2nd term=0+1*2+2*2=6 3rd term=0+1*2+2*2+4*2=14

and so on.