

# Splitting Bacteria

Professor Octopewpew is currently doing an experiment on a new type of bacteria. This new Bacteria has a new characteristic where it splits into 2 in every X minutes, Therefore Professor Octopewpew wants to know the end total of bacteria after Y Minutes.

Professor Octopewpew will provide you with the current number of starting bacteria, the interval where the bacteria splits, and how many minutes will the experiment be conducted.

As the one of the interns in Professor Octopewpew's laboratory, you are asked to solve this simple yet interesting problem. Help Professor Octopewpew immediately!

### Format Input

The input of this problem starts with integers N, X, and Y which represents the number of initial bacteria, the interval where the bacteria splits, and the number of minutes the experiment will be held.

## Format Output

The output of this problem shows the number of the bacteria after Y minutes.

## Constraints

- $0 < N \le 5$
- $0 < X \le 50$
- $0 \le Y \le 50$



## Sample Input (standard input)

2 2 4

## Sample Output (standard output)

8

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Profesor Octopewpew saat ini sedang melakukan percobaan pada jenis bakteri baru. Bakteri baru ini memiliki ciri - ciri dimana ia membelah menjadi 2 setiap X menit, Oleh karena itu Professor Octopewpew ingin mengetahui jumlah akhir bakteri setelah Y Menit.

Profesor Octopewpew akan memberi Anda jumlah bakteri awal saat ini, interval di mana bakteri membelah, dan berapa menit percobaan akan dilakukan.

Sebagai salah satu karyawan di laboratorium Profesor Octopewpew, Anda diminta untuk memecahkan masalah sederhana ini. Bantu Profesor Octopewpew segera!

#### Format Input

Input dari soal ini dimulai dengan bilangan bulat N, X, dan Y yang menyatakan jumlah bakteri awal, interval bakteri membelah, dan jumlah menit percobaan akan dilakukan.

#### Format Output

Keluaran dari soal ini menunjukkan jumlah bakteri setelah Y menit.

#### **Constraints**

- $0 < N \le 5$
- 0 < X < 50
- 0 < Y < 50

## Sample Input (standard input)

2 2 4

# Sample Output (standard output)

8

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