

We use the integers  $a$ ,  $b$ , and  $n$  to create the following series:

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

You are given  $q$  queries in the form of  $a$ ,  $b$ , and  $n$ . For each query, print the series corresponding to the given  $a$ ,  $b$ , and  $n$  values as a single line of  $n$  space-separated integers.

### Input Format

The first line contains an integer,  $q$ , denoting the number of queries.

Each line  $i$  of the  $q$  subsequent lines contains three space-separated integers describing the respective  $a_i$ ,  $b_i$ , and  $n_i$  values for that query.

### Constraints

- $0 \leq q \leq 500$
- $0 \leq a, b \leq 50$
- $1 \leq n \leq 15$

### Output Format

For each query, print the corresponding series on a new line. Each series must be printed in order as a single line of  $n$  space-separated integers.

### Sample Input

```
2
0 2 10
5 3 5
```

### Sample Output

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

### Explanation

We have two queries:

- We use  $a = 0$ ,  $b = 2$ , and  $n = 10$  to produce some series  $s_0, s_1, \dots, s_{n-1}$ .

```
1 import java.util.*;
2 import java.io.*;
3
4 class Solution {
5     public static void main(String []argh){
6         Scanner in = new Scanner(System.in);
7         int sum = 0;
8         int t=in.nextInt();
9         for(int i=0;i<t;i++){
10             int a = in.nextInt();
11             int b = in.nextInt();
12             int n = in.nextInt();
13             if( (n>=1&&n<=15) && (a>=0&&a<=50) && (b>=0&&b<=50) ){
14                 int j=0;
15                 while(j<n){
16                     int s = (int)Math.pow(2,j)*b;
17                     sum = sum+s;
18                     int ss = sum+a;
19                     System.out.print(ss + " ");
20                     j++;
21                 }
22                 sum = 0;
23                 int ss = 0;
24             }
25             System.out.println("");
26         }
27         in.close();
28     }
29 }
30
```

Line: 29 Col: 2

Upload Code as File

Test against custom input

Run Code

Submit Code

Problem

Submissions

Leaderboard

Discussions

Editorial

We use the integers  $a$ ,  $b$ , and  $n$  to create the following series:

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

You are given  $q$  queries in the form of  $a$ ,  $b$ , and  $n$ . For each query, print the series corresponding to the given  $a$ ,  $b$ , and  $n$  values as a single line of  $n$  space-separated integers.

Input Format

The first line contains an integer,  $q$ , denoting the number of queries.  
Each line  $i$  of the  $q$  subsequent lines contains three space-separated integers describing the respective  $a_i$ ,  $b_i$ , and  $n_i$  values for that query.

Constraints

- $0 \leq q \leq 500$
- $0 \leq a, b \leq 50$
- $1 \leq n \leq 15$

Output Format

For each query, print the corresponding series on a new line. Each series must be printed in order as a single line of  $n$  space-separated integers.

Sample Input

```
2
0 2 10
5 3 5
```

Sample Output

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

Explanation

We have two queries:

- We use  $a = 0$ ,  $b = 2$ , and  $n = 10$  to produce some series  $s_0, s_1, \dots, s_{n-1}$ :

```
24 }
25     System.out.println("");
26 }
27     in.close();
28 }
29
30
```

Line: 29 Col: 2

[Upload Code as File](#) ☐ [Test against custom input](#)

Run Code

Submit Code

Congratulations!

You have passed the sample test cases. Click the submit button to run your code against all the test cases.

Sample Test case 0

Input (stdin)

[Download](#)

Sample Test case 1

```
1 2
2 0 2 10
3 5 3 5
```

Your Output (stdout)

```
1 2 6 14 30 62 126 254 510 1022 2046
2 8 14 26 50 98
```

Expected Output

[Download](#)

```
1 2 6 14 30 62 126 254 510 1022 2046
2 8 14 26 50 98
```

We use the integers  $a$ ,  $b$ , and  $n$  to create the following series:

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

You are given  $q$  queries in the form of  $a$ ,  $b$ , and  $n$ . For each query, print the series corresponding to the given  $a$ ,  $b$ , and  $n$  values as a single line of  $n$  space-separated integers.

#### Input Format

The first line contains an integer,  $q$ , denoting the number of queries.

Each line  $i$  of the  $q$  subsequent lines contains three space-separated integers describing the respective  $a_i$ ,  $b_i$ , and  $n_i$  values for that query.

#### Constraints

- $0 \leq q \leq 500$
- $0 \leq a, b \leq 50$
- $1 \leq n \leq 15$

#### Output Format

For each query, print the corresponding series on a new line. Each series must be printed in order as a single line of  $n$  space-separated integers.

#### Sample Input

```
2
0 2 10
5 3 5
```

#### Sample Output

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

#### Explanation

We have two queries:

1. We use  $a = 0$ ,  $b = 2$ , and  $n = 10$  to produce some series  $s_0, s_1, \dots, s_{n-1}$ :

```
24
25     System.out.println("");
26     }
27     in.close();
28 }
29
30
```

Line: 29 Col: 2

[Upload Code as File](#)☐ Test against custom input

Run Code

Submit Code

## Congratulations!

You have passed the sample test cases. Click the submit button to run your code against all the test cases.

#### ✓ Sample Test case 0

Input (stdin)

[Download](#)

#### ✓ Sample Test case 1

```
1 3
2 3 3 3
3 0 0 5
4 6 6 10
```

Your Output (stdout)

```
1 6 12 24
2 0 0 0 0
3 12 24 48 96 192 384 768 1536 3072 6144
```

Expected Output

[Download](#)

🪟 🔍 📁 📧 📁 🌐

Search

ENG

IN

1:43 PM

2/13/2023

2

Problem

Submissions

Leaderboard

Discussions

Editorial

← → ↺ 🏠

hackerrank.com/challenges/java-loops/problem?isFullScreen=true

🔖 ☆ 🗂 ⌵

HackerRank

Prepare > Java > Introduction > Java Loops II

Exit Full Screen View

We use the integers  $a$ ,  $b$ , and  $n$  to create the following series:

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

You are given  $q$  queries in the form of  $a$ ,  $b$ , and  $n$ . For each query, print the series corresponding to the given  $a$ ,  $b$ , and  $n$  values as a single line of  $n$  space-separated integers.

**Input Format**

The first line contains an integer,  $q$ , denoting the number of queries.

Each line  $i$  of the  $q$  subsequent lines contains three space-separated integers describing the respective  $a_i$ ,  $b_i$ , and  $n_i$  values for that query.

**Constraints**

- $0 \leq q \leq 500$
- $0 \leq a, b \leq 50$
- $1 \leq n \leq 15$

**Output Format**

For each query, print the corresponding series on a new line. Each series must be printed in order as a single line of  $n$  space-separated integers.

**Sample Input**

```
2
0 2 10
5 3 5
```

**Sample Output**

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

**Explanation**

We have two queries:

1. We use  $a = 0$ ,  $b = 2$ , and  $n = 10$  to produce some series  $s_0, s_1, \dots, s_{n-1}$ .


Line: 29 Col: 2

📁 Upload Code as File

☐ Test against custom input

Run Code

Submit Code



You have earned 10.00 points!

You are now 2 points away from the 2nd star for your Java badge.

92%

48/50

Congratulations

You solved this challenge. Would you like to challenge your friends? [f](#) [t](#) [in](#)

Next Challenge

✔ Test case 0

✔ Test case 1

✔ Test case 2

✔ Test case 3

✔ Test case 4

Compiler Message

Success

Input (stdin)

1	2
2	0 2 10
3	5 3 5




Download

Expected Output

1	2 6 14 30 62 126 254 510 1022 2046
2	8 14 26 50 98

Download

90°F Sunny

  Search 

ENG IN

1:44 PM 2/13/2023

2