

## Practice Problem Set 3

1. Write a C program that takes an integer  $n$  as input and print all odd numbers from 1 to  $n$ .

Examples

Input
10
Output
1 3 5 7 9

2. Write a C program that takes an integer  $n$  as input and print first  $n$  odd positive integers.

Examples

Input
10
Output
1 3 5 7 9 11 13 15 17 19

3. Write a C program that takes two integers  $a$ ,  $b$  as inputs and print all multiples of 3 in range  $[a, b]$ .

Examples

Input
10 21
Output
12 15 18 21

4. Write a C program that takes two integers  $x$  and  $n$  as input and calculate  $x^n$  using loop.

Examples

Input
2 3
Output
8

5. Write a C program that takes an integer  $n$  as input and calculates the summation of the following series for first  $n$  terms.

$$3^3 + 6^3 + 9^3 + \dots + (3n)^3$$

Examples

Input
3
Output
972

6. Write a C program that takes an integer  $n$  as input and calculate the summation of the following series for first  $n$  terms.

$$1.2 + 2.3 + 3.3 + \dots + n.3$$

Examples

Input
3
Output
17

7. Write a C program that takes an integer  $n$  as input and calculate the summation of the following series for first  $n$  terms.

$$1.3^1 + 2.3^2 + 3.3^3 + \dots + n.3^n$$

Examples

Input
3

Output
102

8. Write a C program that takes an integer  $n$  as input and calculate the summation of the following series for first  $n$  terms.

$$1.2.3 + 2.3.4 + \dots + n.(n+1)(n+2)$$

Examples

Input
10
Output
4290

9. Write a C program to count the divisors of a number.

Examples

Input
18
Output
6

10. Write a C program to count the odd divisors of a number.

Examples

Input
18
Output
2

11. Write a C program to print the digits of a number using loop.

Examples

Input
1234
Output
4 3 2 1

12. Write a C program to reverse a number using loop.

Examples

Input
1234
Output
4321

13. Write a C program to check if a given number is an Armstrong number or not.

Hints: An Armstrong number is a number that is equal to the sum of cubes of its digits, e.g.

$$1634 = 1^3 + 6^3 + 3^3 + 4^3$$

Examples

Input	Input
1634	1234
Output	Output
Armstrong Number	Not an Armstrong Number