[LAB3_5] Fibonacci sequence can be defined as a list of numbers that starts with 0 and 1, and every subsequent number is the sum of the previous two. For example, the list of Fibonacci sequence up to 30 would be 0, 1, 1, 2, 3, 5, 8, 13, 21.

Write a C program to generate the Fibonacci sequence up to a certain number <u>n without using</u> <u>array</u>.

Input

n denotes an integer, where $1 \le n \le 1,000$

Output

Print the subsequent numbers of Fibonacci sequence up to n, separating a white space.

Input sample	Output sample
30	0 1 1 2 3 5 8 13 21
1	0 1