

Fibonacci Easy

Print the n first fibonacci numbers. You must know that the first 2 fibonacci numbers are 1,1.

Input

The first line will contain a number C ($1 \leq C \leq 100$). Then, will follow C lines, each one with a number N ($1 \leq M \leq 45$).

Output

For each N you must print the N first fibonacci, each one followed by a whitespace.

Example

Input:

5

1

2

3

5

8

Output:

1

1 1

1 1 2

1 1 2 3 5

1 1 2 3 5 8 13 21