Write an efficient program to find and print a Fibonacci sequence of numbers. The Fibonacci sequence is defined as follows:

\[ F_n = F_{n-2} + F_{n-1}, \quad n \geq 2, \quad \text{where} \quad F_0 = 0, \quad F_1 = 1 \]

Your program should prompt the user to enter a limit, print the sequence up to the limit, and then indicate what is the greatest power of 2 that the final number printed is divisible by. Note: You are NOT allowed to use the divide function.

Here is a sample of what the user will see when the program is executed:

This program prints the Fibonacci sequence

Enter a limit on the largest number to be displayed: 50
1 1 2 3 5 8 13 21 34

The last number 34 is divisible by 2.

Do you want to print a different sequence (Y/N): y

Enter a limit on the largest number to be displayed: 200
1 1 2 3 5 8 13 21 34 55 89 144

The last number 144 is divisible by 16.

Do you want to print a different sequence (Y/N): n