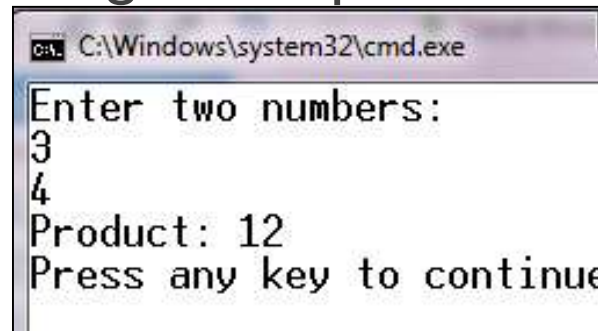


PROBLEM 1: CHEAPER BY THE DOZEN 😊

- You need to buy a big quantity of pens to get ready for the school year, at least 6 dozens ! (6 dozens = $6 * 12 = 72$)
- Implement a program with a function that converts a number to dozens. In case the resulting dozens are 6 or more, the program displays an okay message. Otherwise, it displays that this is not enough.
- Sample Run:
Enter number of pens: 40
Not enough

PROBLEM 2: PRODUCT USING SUM

- Implement a program to compute the product of two numbers by the sum operation using for loop.



```
C:\Windows\system32\cmd.exe
Enter two numbers:
3
4
Product: 12
Press any key to continue
```

- Note:

$$6 \times 4 = 6 + 6 + 6 + 6 = 24$$

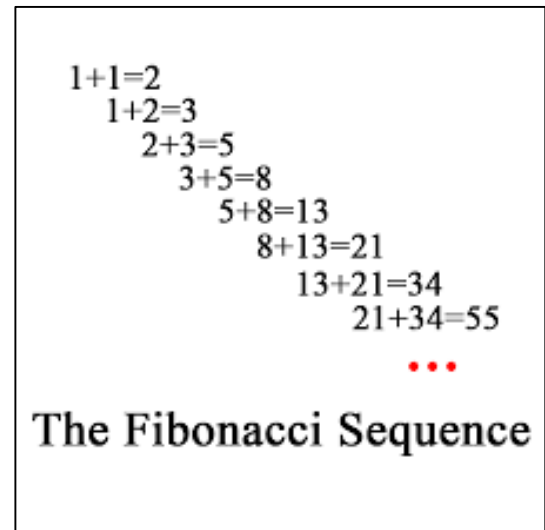
$$3 \times 7 = 3 + 3 + 3 + 3 + 3 + 3 + 3 = 21$$

PROBLEM 3: FIBONACCI SEQUENCE

- Program that displays the first N Fibonacci sequence values after 0 and 1 (without using arrays)

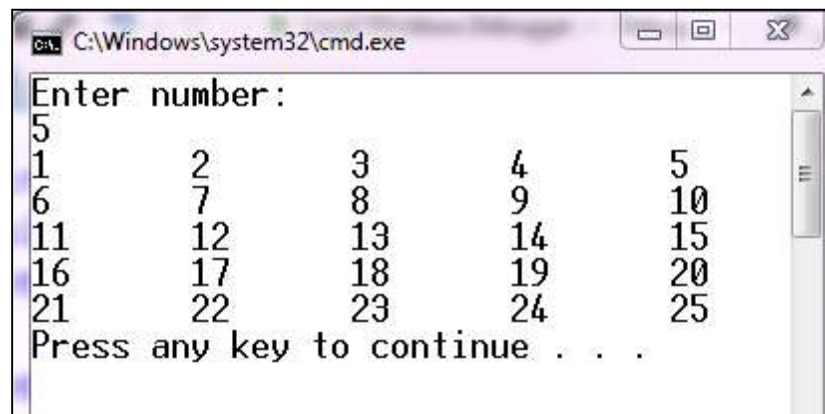
0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144,

$$F_n = F_{n-1} + F_{n-2}$$



PROBLEM 4: NUMBERS GRID

- Write a function that takes as input parameter a number N and then prints on the screen the numbers 1 through N^2 arranged in a $N \times N$ grid.
- An example is shown below, where argument passed is 5.



```
C:\Windows\system32\cmd.exe
Enter number :
5
1      2      3      4      5
6      7      8      9      10
11     12     13     14     15
16     17     18     19     20
21     22     23     24     25
Press any key to continue . . .
```