Assignment 2: Recursive  
Function and Efficiency Analysis - Write a recursive function pseudocode and  
calculate the nth Fibonacci number and use Big O notation to analyze its  
efficiency. Compare this with an iterative approach and discuss the pros and  
cons in terms of space and time complexity.

# Algorithm

1. Start
2. Recursive function is called from main
   1. N is the range of series
   2. First element
   3. Second element
3. Check if N is greater than 0
4. Print the first element
5. Call the function again with N-1,second element and sum of first and second elements as arguments
6. End

# Pseudo Code

Function fib(n, a, b)

If n>0

Print “a”

Call fib n-1,a,a+b

End function

# Code

void fib(int n, int a, int b)

{

    if(n>0)

    {

        printf("%d\t", a);

        fib(n-1, b, a+b);

    }

}