Object Oriented Computing (Java)

Fibonacci Sequence

The FibNum Java program computes the Fibonacci sequence for a given input provided as a command line argument. The user can run the program and specify a non-negative integer 'n' to obtain the nth Fibonacci number. The program utilizes a recursive function, Fib, to calculate Fibonacci numbers efficiently and makes sure that the user provides a valid non-negative input  
  
  
Code:

public class FibNum {

    public static void main(String[] args)

    {

    if(args.length!=1)

    {

        System.out.println("This program accepts command line arguments from the user to compute the Fibonacci numbers that corresponds");

        System.exit(1);

    }

    int n = Integer.parseInt(args[0]);

    if(n<0)

    {

        System.out.println("Please enter a number that is not negative");

        System.exit(1);

    }

    System.out.print(Fib(n));

}

private static int Fib(int n)

{

    if (n<= 1)

    {

        return n;

    }

    return Fib(n-1)+Fib(n-2);

}

}