**package** lp3;

**import** java.util.Scanner;

**public** **class** FibonacciWithoutRecursion {

**public** **static** **void** main(String[] args) {

Scanner scanner = **new** Scanner(System.***in***);

System.***out***.print("Enter the number of Fibonacci terms to calculate: ");

**int** n = scanner.nextInt();

scanner.close();

**long**[] fibArray = **new** **long**[n + 1];

**long** stepCount = 0;

**if** (n >= 0) {

**if** (n >= 1) {

fibArray[1] = 1;

stepCount++;

}

**if** (n >= 2) {

fibArray[2] = 1;

stepCount++;

}

**for** (**int** i = 3; i <= n; i++) {

fibArray[i] = fibArray[i - 1] + fibArray[i - 2];

stepCount++;

}

System.***out***.println("Fibonacci Sequence:");

**for** (**int** i = 1; i <= n; i++) {

System.***out***.println("F(" + i + ") = " + fibArray[i]);

}

System.***out***.println("Total Steps: " + stepCount);

} **else** {

System.***out***.println("Please enter a non-negative number.");

}

}

}