**package** lp3;

**public** **class** FibonacciWithRecursion {

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

**int** n = 6; // Change this value to calculate Fibonacci for a different number

System.***out***.println("Calculating Fibonacci number for n = " + n);

**long** startTime = System.*nanoTime*();

**long** result = *fibonacci*(n);

**long** endTime = System.*nanoTime*();

System.***out***.println("Fibonacci(" + n + ") = " + result);

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

System.***out***.println("Time taken: " + (endTime - startTime) + " nanoseconds");

}

**static** **long** *stepCount* = 0;

**public** **static** **long** fibonacci(**int** n) {

*stepCount*++;

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

**return** n;

} **else** {

**return** *fibonacci*(n - 1) + *fibonacci*(n - 2);

}

}

}