

Package `com.kevin`

## Class `FibonnaciRecorder`

`java.lang.Object`  
`com.kevin.FibonnaciRecorder`

```
public class FibonnaciRecorder
extends java.lang.Object
```

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### Constructor Summary

#### Constructors

Constructor	Description
<code>FibonnaciRecorder()</code>	

### Method Summary

**All Methods**    **Static Methods**    **Concrete Methods**

Modifier	Method and Type	Description
static	<code>createChart</code> void    (java.util.ArrayList<java.lang.Long> iterativeTimes, java.util.ArrayList<java.lang.Long> recursiveTimes)	Using this method exports a line chart to a .png file with results from the sequences.
static	<code>fibonacciIterative</code> (int n) int	This is the iterative implementation of the Fibonacci sequence.
static	<code>fibonacciRecursive</code> (int n) int	This is the recursive

**Modifier Method  
and  
Type****Description**

implementation of the Fibonacci sequence.

```
static main(java.lang.String[] args)
void
```

The main method stores data from the Fibonacci methods as well as the times needed to execute them.

```
static recordData
void (java.util.ArrayList<java.lang.Long> iterativeTimes,
      java.util.ArrayList<java.lang.Long> recursiveTimes,
      java.util.ArrayList<java.lang.Integer> results)
```

This method exports a text file with results from the sequence, with the Fibonacci sequence itself as reference.

**Methods inherited from class java.lang.Object**

`equals`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

**Constructor Details****FibonnaciRecorder**

```
public FibonnaciRecorder()
```

**Method Details****main**

```
public static void main(java.lang.String[] args)
```

The main method stores data from the Fibonacci methods as well as the times needed to execute them. It also will store the actual Fibonacci sequence to pass to the `recordData (ArrayList, ArrayList, ArrayList)` method.

### createChart

```
public static void createChart(  
    java.util.ArrayList<java.lang.Long> iterativeTimes,  
    java.util.ArrayList<java.lang.Long> recursiveTimes)
```

Using this method exports a line chart to a .png file with results from the sequences. The x axis represents the number of terms used, and the y axis represents time taken to execute the method in nanoseconds.

#### Parameters:

`iterativeTimes` - The time data for the iterative method.

`recursiveTimes` - The time data for the recursive method.

### recordData

```
public static void recordData(  
    java.util.ArrayList<java.lang.Long> iterativeTimes,  
    java.util.ArrayList<java.lang.Long> recursiveTimes,  
    java.util.ArrayList<java.lang.Integer> results)
```

This method exports a text file with results from the sequence, with the Fibonacci sequence itself as refrence.

#### Parameters:

`iterativeTimes` - The time data for the iterative method.

`recursiveTimes` - The time data for the recursive method.

`results` - The Fibonacci sequence, recorded by using the iterative method.

### fibonacciIterative

```
public static int fibonacciIterative(int n)
```

This is the iterative implementation of the Fibonacci sequence.

#### Parameters:

n - The number of terms to be used.

**Returns:**

Returns the nth number in the sequence.

**fibonacciRecursive**

```
public static int fibonacciRecursive(int n)
```

This is the recursive implementation of the Fibonacci sequence.

**Parameters:**

n - The number of terms to be used.

**Returns:**

Returns the nth number in the sequence.