## **Class Main**

java.lang.Object Main

public class Main
extends Object

Module 5 Assignment to calculate Fibonacci number and time in nanoseconds

## Author:

Nic Andrade

# **Constructor Summary**

## **Constructors**

**Constructor** Description

Main()

## **Method Summary**

All Methods	Static Methods Concrete Methods	
Modifier and Typ	e Method	Description
static int	<pre>fibonacciIterative(Integer sequenceSpot)</pre>	Utilized to calculate the Fibonacci sequence using a iterative method, and return time in nanoseconds to calculate.
static int	<pre>fibonacciRecursive(Integer sequenceSpot)</pre>	Utilized to calculate the Fibonacci sequence using a recursive method, and return time in nanoseconds to calculate.
static void	main(String [] args)	Main method used to calculate a Fibonacci number recursivily and iteratively, and time to calculate.
static void	<pre>outputText(String sequenceType, long value, long totalTime)</pre>	Generates text output of values from method calls
static long	<pre>timer(long startTime)</pre>	Used to calculate the time in nanoseconds between a passed start time and the time the method is called.

## Methods inherited from class java.lang.Object

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

## Constructor Details

## Main

public Main()

## **Method Details**

## main

public static void main(String [] args)

Main method used to calculate a Fibonacci number recursivily and iteratively, and time to calculate.

#### Parameters:

args - Strings passed to the main.

## fibonacciRecursive

public static int fibonacciRecursive(Integer sequenceSpot)

Utilized to calculate the Fibonacci sequence using a recursive method, and return time in nanoseconds to calculate.

#### Parameters:

sequenceSpot - Value of what position in the Fibonacci sequence you want to know the value of.

#### Returns:

Fibonacci value in the sequence spot requested

## fibonaccilterative

```
public static int fibonacciIterative(Integer sequenceSpot)
```

Utilized to calculate the Fibonacci sequence using a iterative method, and return time in nanoseconds to calculate.

#### Parameters:

sequenceSpot - Value of what position in the Fibonacci sequence you want to know the value of.

#### Returns:

Fibonacci value in the sequence spot requested

## timer

```
public static long timer(long startTime)
```

Used to calculate the time in nanoseconds between a passed start time and the time the method is called.

#### Parameters:

startTime - Initial value of time to be used

## Returns:

Duration in nanoseconds the timer has been running.

## outputText

Generates text output of values from method calls

### Parameters:

sequenceType - String value used to identify call type

value - Long value of number in Fibonacci sequence

totalTime - Long value of total time in nanoseconds it took to calculate Fibonacci number