iteration1

Class CalculatorGui

java.lang.Object
    javafx.application.Application
        iteration1.CalculatorGui

```
public class CalculatorGui
extends javafx.application.Application
```

Author:

`Fadi Hariri`

Nested Class Summary

Nested classes/interfaces inherited from class javafx.application.Application

`javafx.application.Application.Parameters`

Field Summary

Fields inherited from class javafx.application.Application

`STYLESHEET_CASPIAN, STYLESHEET_MODENA`

Constructor Summary

Constructors

Constructor and Description
`CalculatorGui()`

Method Summary

All Methods | Static Methods | Instance Methods | Concrete Methods

Modifier and Type	Method and Description
`static void`	`main(java.lang.String[] args)`
`void`	`start(javafx.stage.Stage primaryStage)`

Methods inherited from class javafx.application.Application

`getHostServices, getParameters, getUserAgentStylesheet, init, launch, launch, notifyPreloader, setUserAgentStylesheet, stop`

Methods inherited from class java.lang.Object

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

Constructor Detail

CalculatorGui

```
public CalculatorGui()
```

Method Detail

main

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

start

```
public void start(javafx.stage.Stage primaryStage)
           throws java.lang.Exception
```

Specified by:

`start` in class `javafx.application.Application`

Throws:

`java.lang.Exception`

PACKAGE CLASS USE TREE DEPRECATED INDEX HELP

PREV CLASS **NEXT CLASS** FRAMES NO FRAMES ALL CLASSES

SUMMARY: NESTED | FIELD | CONSTR | METHOD DETAIL: FIELD | CONSTR | METHOD

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Class Calculator

java.lang.Object
    iteration1.Calculator

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

Author:

Fadi Hariri

Constructor Summary

Constructors

Constructor and Description
`Calculator()`

Method Summary

All Methods **Instance Methods** **Concrete Methods**

Modifier and Type	Method and Description
`java.lang.String`	`evalTokens(java.util.Queue<java.lang.String> tokens)`
`double`	`evaluate()`

Methods inherited from class java.lang.Object

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

Constructor Detail

Calculator

```
public Calculator()
```

Method Detail

evalTokens

```
public java.lang.String evalTokens(java.util.Queue<java.lang.String> tokens)
```

Parameters:

`tokens` - queue

Returns:

String output of evaluated expression

evaluate

```
public double evaluate()
```

Returns:

Value of expression after evaluating infixQueue

Throws:

`IllegalExpressionException` - if the expression is erroneuosly constructed.

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Class Compute

java.lang.Object
    iteration1.Compute

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

Author:

Fadi Hariri, Maryna Kalachova, Nicholas Hillier, Navdeep Singh, Savithru Teja

Constructor Summary

Constructors

Constructor and Description
Compute() Initialize the computation of pi and ln2 constants.

Method Summary

All Methods | **Instance Methods** | **Concrete Methods**

Modifier and Type	Method and Description
double	**factorial**(double val) Factorial
double	**log10**(double x)
double	**powerOfTen**(double x)
double	**powerOfX**(double x, double y)
double	**sin**(double angle)
double	**squareRoot**(double x)

Methods inherited from class java.lang.Object

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

Constructor Detail

Compute

```
public Compute()
```

Initialize the computation of pi and ln2 constants.

Method Detail

powerOfTen

```
public double powerOfTen(double x)
```

Parameters:

`x - a double`

Returns:

`double corresponding to 10^x`

squareRoot

```
public double squareRoot(double x)
```

Parameters:

`x - a double`

Returns:

`double corresponding to _/x`

powerOfX

```
public double powerOfX(double x,
                       double y)
```

Parameters:

`x - a double representing a base`

`y - a double representing a power`

Returns:

double corresponding to x^y

log10

```
public double log10(double x)
```

Parameters:

x - double representing a power

Returns:

double corresponding to log10(x)

sin

```
public double sin(double angle)
```

Parameters:

angle - in degrees

Returns:

double corresponding to sin(angle). The method converts the angle to radians prior to computation.

factorial

```
public double factorial(double val)
```

Factorial

Parameters:

val - a non-floating point double

Returns:

double Factorial of val.

Throws:

StackOverFlow - exception with floating point input values.