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

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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 âˆšx

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.