Rational. To Single Method

名前空間: WS.Theia.ExtremelyPrecise

アセンブリ: Extremely Precise.dll

指定した Rational の値を、それと等価の単精度浮動小数点数に変換します。

public static float ToSingle(Rational value);

パラメーター

value Rational 変換する Rational。

戻り値

value Single value と等価の単精度浮動小数点数。

例外

OverflowException

Value が MinValue より小さいか MaxValue より大きい場合。

例

次の例では ToSingle (Rational)メソッドを使って単精度浮動小数値に変換しています。

```
// Example of the Rational.ToSingle and Rational.ToDouble methods.
using System;

class RationalToSgl_DblDemo
{
    static string formatter = "{0,30}{1,17}{2,23}";
```

```
// Convert the decimal argument; no exceptions are thrown.
public static void RationalToSgl_Dbl( Rational argument )
    object SingleValue;
    object DoubleValue;
    // Convert the argument to a float value.
    SingleValue = Rational.ToSingle( argument );
    // Convert the argument to a double value.
    DoubleValue = Rational.ToDouble( argument );
    Console.WriteLine(formatter, argument,
         SingleValue, DoubleValue);
}
public static void Main()
    Console.WriteLine( "This example of the \u21amman" +
        " Rational.ToSingle(Rational) and \u21am +" +
        " Rational.ToDouble(Rational) ¥nmethods"+
         "generates the following output. It ¥ndisplays " +
         "several converted decimal values.\(\frac{\pman}{n}\);
    Console.WriteLine(formatter, "decimal argument",
        "float", "double");
    Console.WriteLine(formatter, "-----",
         "----", "-----");
    // Convert decimal values and display the results.
    RationalToSgl_Dbl( 0.00000000000000000000000001M);
    RationalToSgl_Dbl( 0.000000000123456789123456789M);
    RationalToSgl_Dbl( 123M );
    RationalToSgl_Dbl( new decimal( 123000000, 0, 0, false, 6 ));
    RationalToSgl_Dbl( 123456789.123456789M);
    RationalToSgl_Dbl( 123456789123456789123456789M);
```

```
RationalToSgl_Dbl( decimal.MinValue );
RationalToSgl_Dbl( decimal.MaxValue );
}

/*
This example of the
Rational.ToSingle( Rational ) and
Rational.ToDouble( Rational )
methods generates the following output. It
displays several converted decimal values.
```

decimal argument	float	double
0.000000000000000000000000000001	1E-28	1E-28
0.0000000000123456789123456789	1.234568E-11	1.23456789123457E-11
123	123	123
123.000000	123	123
123456789.123456789	1.234568E+08	123456789.123457
123456789123456789123456789	1.234568E+26	1.23456789123457E+26
-79228162514264337593543950335	-7.922816E+28	-7.92281625142643E+28
79228162514264337593543950335	7.922816E+28	7.92281625142643E+28
*/		

注釈

この操作は単精度浮動小数の有効桁数が少ない為、丸めによる誤差が発生します。変換結果は Single 型への明示的なキャストと等価です。

適用対象

.NET Core

2.0

.NET Framework

4.6.1

.NET Standard

2.0

UWP

10.0.16299

Xamarin.Android

8.0

Xamarin.iOS

10.14

Xamarin.Mac

3.8