Julia Exponential Function – Examples

Julia Exponential Function

Julia Exponential Root is used to find the exponent of a number.

In this tutorial, we will learn how to use the exponential function, `exp()` with examples.

If the argument to the exponential function is near zero and you require an accurate computation of the exponential function, use `expm1(x)` function.

Example 1 – Julia Exponential Function

Exponential function with Integer

```
julia> x = 2
2

julia> exp(x)
7.38905609893065
```

Exponential function with Floating Point Numbers

```
julia> x = 3.5241
3.5241

julia> exp(x)
33.92322896714677
```

Exponential function with Complex Numbers

```
julia> x = 3 + 5im
3 + 5im

julia> exp(x)
5.697507299833739 - 19.26050892528742im
```

Example 2 – Julia Exponential Function – expm1

The accurate value of an exponential function is calculated with expm1() function. In the following example, we compared the accurate value of the exponential of an extremely small value (near to zero) with exp() function.

```
julia> x = 0.000000001
1.0e-9

julia> exp(x)
1.000000001

julia> expm1(x)
1.0000000005000001e-9
```

Conclusion

In this Julia Tutorial, we learned about Julia Exponential Function and its usage with the help of example scripts.