

How can I find the antilog of values in Python?

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The process of finding the antilog of values in Python involves using the math module to calculate the inverse logarithm of a given number. This can be achieved by utilizing the `math.exp()` function, which takes the logarithmic value as its argument and returns the corresponding antilog value. This method is commonly used in mathematical and scientific calculations, where finding the antilog is necessary for further analysis and problem solving. By using Python, users can easily and accurately find the antilog of any desired value with just a few lines of code, making it a convenient and efficient tool for data analysis and manipulation.

Find the Antilog of Values in Python

The antilog of a number is the inverse of the log of a number.

So, if you calculate the log of a number you can then use the antilog to get back the original number.

For example, suppose we start with the number 7. If we take the log (base 10) of 7 then we would get .845:

$$\log_{10}(7) = .845$$

The antilog (base 10) of the value 0.845 can be found by taking 10 raised to the power of 0.845:

$$10^{.845} = 7$$

The antilog allowed us to get back the original number.

The following table shows how to calculate the antilog

of values in Python according to their base:

Base	Number	Log	Antilog
e	x	np.log(x)	np.exp(x)
10	x	np.log10(x)	10 ** x

The following examples show how to calculate the antilog of values in Python using different values for the base.

Example 1: Calculating the Antilog of Base 10

Suppose we take the log (base 10) of the value 7:

```
import numpy as np
```

```
#define original value
```

```
original = 7
```

```
#take log (base 10) of original value
```

```
log_original = np.log10(original)
```

```
#display log (base 10) of original value
```

```
log_original
```

```
0.845098
```

In order to get back the original value of 7, we can take

the antilog by raising 10 to the power of 0.845098:

```
#take the antilog  
10 ** log_original
```

7.0

By taking the antilog, we were able to obtain the original value of 7.

Example 2: Calculating the Antilog of a Natural Log

```
#define original value  
original = 7  
  
#take natural log of original value  
log_original = np.log(original)  
  
#display natural log of original value  
log_original  
  
1.94591
```

In order to get back the original value of 7, we can take the antilog by raising e to the power of 1.94591:

```
#take the antilog  
np.exp(log_original)
```

7.0

By taking the antilog, we were able to obtain the original value of 7.

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