



scipy

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```
from scipy import special
a = special.exp10(2)
print (a)

b = special.exp2(3)
print (b)

c = special.sindg(90)
print (c)

d = special.cosdg(90)
print (d)
```

```
100.0
8.0
1.0
-0.0
```

Special Function

```
from scipy import integrate

i = integrate.quad(lambda x: special.exp10(x), 0, 1)
print (i)

e = lambda x,y: x*y**2
f = lambda x: 1
g = lambda x: -1
integrate.dblquad (e, 0, 2, f, g)

(3.9086503371292665, 4.3394735994897923e-14)
(-0.0, 4.405142707569776e-14)
```

Integration



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```
from scipy.fftpack import fft, ifft
import numpy as np
x = np.array([1,2,3,4])
```

```
#Fourier transformation
y = fft(x)
print (y)
```

```
#Inverse Fourier Transformation
z = ifft(x)
print (z)
```

```
[10.-0.j -2.+2.j -2.-0.j -2.-2.j]
[ 2.5-0.j -0.5-0.5j -0.5-0.j -0.5+0.5j]
```

Fourier Transformation