

```
✓ [65] #np.cumprod(): cumulative product  
0s #used to calculate the cumulative product of array elements along a specified axis or across all axes  
import numpy as np  
a=np.array([1,2,3,4]) # 1D array  
np.cumprod(a) #gives cummulative product  
  
array([ 1,  2,  6, 24])
```

```
✓ [66] ▶ b=np.arange(10,21) #range of values from 10 to 20  
0s np.cumprod(b)  
  
array([          10,          110,          1320,          17160,  
        240240,        3603600,        57657600,       980179200,  
       17643225600,      335221286400,      6704425728000])
```

```
[70] b = np.arange(10).reshape(2,5)  
np.cumprod(b)  
  
array([0, 0, 0, 0, 0, 0, 0, 0, 0, 0])
```

```
✓ [72] np.cumprod(b, axis=0) #along axis 0  
0s  
  
array([[ 0,  1,  2,  3,  4],  
       [ 0,  6, 14, 24, 36]])
```

```
✓ [74] np.cumprod(b, axis=1) #along axis 1  
0s  
  
array([[ 0,  0,  0,  0,  0],  
       [ 5, 30, 210, 1680, 15120]])
```

```
✓ [75] a=np.array([[1,2,3,4],[5,6,7,8]]) # 2D array  
0s np.cumprod(a)  
  
array([ 1,  2,  6, 24, 120, 720, 5040, 40320])
```

```
✓ [76] np.cumprod(a, axis=0) #along axis =0  
0s  
  
array([[ 1,  2,  3,  4],  
       [ 5, 12, 21, 32]])
```

```
✓ [77] ▶ np.cumprod(a, axis=1) #along axis =0  
0s  
  
array([[ 1,  2,  6, 24],  
       [ 5, 30, 210, 1680]])
```