

```
import numpy as np
lst1=[1,2,3]
array1=np.array(lst1)
print("array = ",lst1)
print("array = ,array1")
```

```
array = [1, 2, 3]
array = ,array1
```

```
type(lst1)
```

```
list
```

```
import numpy as np
array1=np.array([10,20,30])
array2=np.array([2,2,2,])
print("array2 multtliplied by array1: ",array1*array2)
print("array2 devided by array1:",array2/array1)
print("array2 raised to the power of array1: ",array2**array1)
print("Adding two numpy arrays {array1} and {array2} together:",array1+array2)
```

```
➞ array2 multtliplied by array1: [20 40 60]
array2 devided by array1: [0.2      0.1      0.06666667]
array2 raised to the power of array1: [      1024    1048576 1073741824]
Adding two numpy arrays {array1} and {array2} together: [12 22 32]
```

```
import numpy as np
array1= np.array([10,20,30])
#sine function
print("sine:",np.sin(array1))
#logarithm
print("Natural logarithm: ",np.log(array1))
print("Base-10 logarithm: ",np.log10(array1))
print("Base-2 logarithm: ",np.log2(array1))
#exponential
print("exponential: ",np.exp(array1))
```

```
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Natural logarithm: [2.30258509 2.99573227 3.40119738]
Base-10 logarithm: [1.          1.30103    1.47712125]
Base-2 logarithm: [3.32192809 4.32192809 4.9068906 ]
exponential: [2.20264658e+04 4.85165195e+08 1.06864746e+13]
```