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

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

```
import numpy as np
array1=np.array([10,20,30])
array2=np.array([2,2,2])

print("array2 multiplied by array1: ",array1*array2)
print("array2 divided 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 multiplied by array1:  [20 40 60]
array2 divided 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.exp(array1))
#Exponential
print("Exponential: ",np.exp(array1))
```

```
Sine:  [-0.54402111  0.91294525 -0.98803162]
Natural logarithm:  [2.30258509 2.99573227 3.40119738]
Base-10 logarithm:  [1.         1.30103    1.47712125]
Base-2 logarithm:  [2.20264658e+04 4.85165195e+08 1.06864746e+13]
Exponential:  [2.20264658e+04 4.85165195e+08 1.06864746e+13]
```