```
Python 3.9.0 (tags/v3.9.0:9cf6752, Oct 5 2020, 15:34:40) [MSC v.1927 64 bit
(AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> import numpy as np
>>> import matplotlib.pyplot as plt
Matplotlib is building the font cache; this may take a moment.
>>> x = np.linspace(0,20,1000) # Creates a 1D array with length 1000.
>>> y = np.sin(x)
>>> plt.plot(x,y)
[<matplotlib.lines.Line2D object at 0x00000284DD73B0A0>]
>>> plt.show()
>>> z = np.sin(x+y)
>>> plt.plot(x,y,z)
[<matplotlib.lines.Line2D object at 0x00000284D4720730>,
<matplotlib.lines.Line2D object at 0x00000284D47200D0>]
>>> plt.show()
>>> plt.show()
>>> plt.show()
>>> plt.xlabel('input')
Text(0.5, 0, 'input')
>>> plt.ylabel('output')
Text(0, 0.5, 'output')
>>> plt.plot(x,y)
[<matplotlib.lines.Line2D object at 0x00000284DE1EE100>]
>>> plt.plot()
[]
>>> plt.show()
>>> y = x**3
>>> plt.plot(x,y)
[<matplotlib.lines.Line2D object at 0x00000284D4525C10>]
>>> plt.show
<function show at 0x00000284D42C1C10>
>>> plt.show()
>>> y = np.sin(x) * x**3
>>> plt.plot(x,y)
[<matplotlib.lines.Line2D object at 0x00000284E0536130>]
>>> plt.show()
>>>
```