

# numpy

October 17, 2019

```
[3]: import numpy as np
a=np.array([1,1,3,1])
a
mean_a=a.mean()
mean_a
```

```
[3]: 1.5
```

```
[6]: np.pi
x=np.array([0,np.pi/2,np.pi])
x
```

```
[6]: array([0.          , 1.57079633, 3.14159265])
```

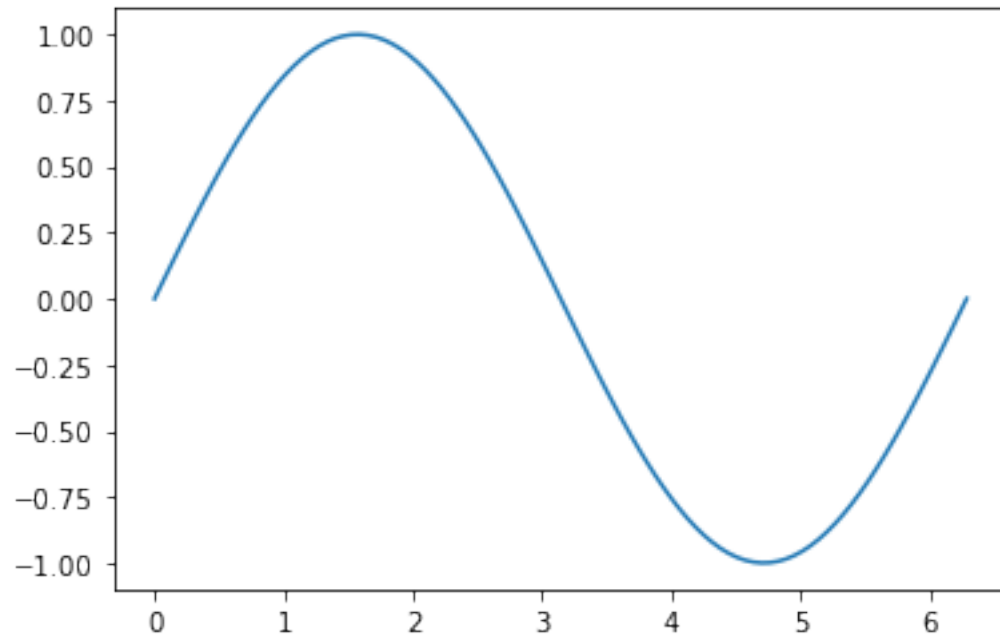
```
[7]: y=np.sin(x)
y
```

```
[7]: array([0.0000000e+00, 1.0000000e+00, 1.2246468e-16])
```

```
[8]: import numpy as np
x=np.linspace(0,2*np.pi,100)
y=np.sin(x)
y

import matplotlib.pyplot as plt
%matplotlib inline
plt.plot(x,y)
```

```
[8]: [<matplotlib.lines.Line2D at 0x7f1c3c1e8160>]
```



```
[10]: import numpy as np
      np.array([1,-1])*np.array([1,1])
      np.dot(np.array([1,-1]),np.array([1,1]))
```

[10]: 0

[ ]: