Basic Python 6 - NumPy - Excercise

December 12, 2020

1 NumPy Excercises

2 Ex 1.

numpy array   1   0 - 100

```
[1]: import numpy as np
     a = np.arange(start=0, stop = 101, step = 2)
     print(a)
```

```
[  0   2   4   6   8  10  12  14  16  18  20  22  24  26  28  30  32  34
  36  38  40  42  44  46  48  50  52  54  56  58  60  62  64  66  68  70
  72  74  76  78  80  82  84  86  88  90  92  94  96  98 100]
```

3 Ex 2.

array   2   5 x 5   random   seed(0)

```
[2]: np.random.seed(0)
     a = np.random.random((5,5))
     print(a)
```

```
[[0.5488135  0.71518937 0.60276338 0.54488318 0.4236548 ]
 [0.64589411 0.43758721 0.891773   0.96366276 0.38344152]
 [0.79172504 0.52889492 0.56804456 0.92559664 0.07103606]
 [0.0871293  0.0202184  0.83261985 0.77815675 0.87001215]
 [0.97861834 0.79915856 0.46147936 0.78052918 0.11827443]]
```

4 Ex 3.

array   2

```
[3]: print(np.sum(a))
```

```
14.769156361309756
```

5 Ex 4.

array   axis 0   2

```
[4]: print(np.sum(a, axis=0))
```

```
[3.0521803  2.50104846 3.35668015 3.99282851 1.86641895]
```