

S03T04

July 28, 2021

1 Exercici 1

```
[17]: import numpy as np

arr = np.array([1, 2, 3, 4, 5, 5])

print(np.mean(arr))
print(np.median(arr))
print(np.min(arr))
print(np.max(arr))
if np.size(np.shape(arr))>1:
    print("Error!")
```

```
1
3.3333333333333335
3.5
1
5
```

2 Exercici 2

```
[19]: from numpy import random

x = random.randint(100, size=(5, 5))

print(x)
```

```
[[ 8 77 18  1 87]
 [39  6 99 82 37]
 [52 69 50 83 56]
 [35 59 55  7 90]
 [20 91 24 63 13]]
```

3 Exercici 3

```
[28]: x = random.randint(100, size=(2, 5))
      print(x)
      print(np.sum([x[0],x[1]], axis=1))
      print(x[0]+x[1])
```

```
[[51 23 99 89  5]
 [98 77 43 40 62]]
[267 320]
[149 100 142 129  67]
```

4 Exercici 4

```
[34]: from scipy import stats

      x = [5,7,8,7,2,17,2,9,4,11,12,9,6]
      y = [99,86,87,88,111,86,103,87,94,78,77,85,86]

      slope, intercept, r, p, std_err = stats.linregress(x, y)

      print(r)
```

```
-0.7585915243761551
```

```
[ ]:
```