f-15-jupyter-copy

March 23, 2021

```python
[1]: import numpy as np
```

```python
[2]: # skalar
     a = 1
```

```python
[3]: b = a
```

```python
[4]: b = 5
```

```python
[5]: b
```

```
[5]: 5
```

```python
[6]: a
```

```
[6]: 1
```

```python
[7]: # ndarray
     a = np.array([1])
```

```python
[8]: a
```

```
[8]: array([1])
```

```python
[9]: b = a
```

```python
[10]: b[0] = 5
```

```python
[11]: b
```

```
[11]: array([5])
```

```python
[12]: a
```

```
[12]: array([5])
```

```python
[13]: # list
      s = [0, 1]
```

```
[14]: t = s
```

```
[15]: t[0] = 5
```

```
[16]: t
```

```
[16]: [5, 1]
```

```
[17]: s
```

```
[17]: [5, 1]
```

```
[18]: def test(a):
          b = a
          b[0] = 16
          return b
```

```
[19]: a = np.array([1, 2, 3])
```

```
[20]: test(a)
```

```
[20]: array([16,  2,  3])
```

```
[21]: a
```

```
[21]: array([16,  2,  3])
```

```
[22]: def test2(a):
          b = np.copy(a)
          b[0] = 15
          return b
```

```
[23]: a = np.array([1, 2, 3])
      a
```

```
[23]: array([1, 2, 3])
```

```
[24]: test2(a)
```

```
[24]: array([15,  2,  3])
```

```
[25]: a
```

```
[25]: array([1, 2, 3])
```

```
[ ]:
```