msd1c

November 22, 2024

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

```python
[5]: array_1d = np.arange(10, 50)
     print(array_1d)
```

```
[10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33
 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49]
```

```python
[6]: array_reshaped = array_1d[:15].reshape(3, 5)
     print(array_reshaped)
```

```
[[10 11 12 13 14]
 [15 16 17 18 19]
 [20 21 22 23 24]]
```

```python
[7]: divisible_by_3 = array_1d[array_1d % 3 == 0]
     print(divisible_by_3)
```

```
[12 15 18 21 24 27 30 33 36 39 42 45 48]
```

```python
[11]: array_random1 = np.random.randint(1, 10, size=(3, 3))
      array_random2 = np.random.randint(1, 10, size=(3, 3))

      print(array_random1)
      print(array_random2)
```

```
[[8 4 7]
 [9 8 3]
 [7 9 9]]
[[2 3 4]
 [9 5 2]
 [7 9 7]]
```

```python
[13]: add_result = array_random1 + array_random2
      sub_result = array_random1 - array_random2
      mul_result = array_random1 * array_random2
      div_result = array_random1 / array_random2
```

```python
print(add_result)
print(sub_result)
print(mul_result)
print(div_result)
```

```
[[10  7 11]
 [18 13  5]
 [14 18 16]]
[[6 1 3]
 [0 3 1]
 [0 0 2]]
[[16 12 28]
 [81 40  6]
 [49 81 63]]
[[4.         1.33333333 1.75      ]
 [1.         1.6        1.5       ]
 [1.         1.         1.28571429]]
```

[ ]: