

In [9]: `import numpy as np`

```
# 1. Create an array of 10 zeros, 10 ones, and 10 fives
zeros_array = np.zeros(10)
ones_array = np.ones(10)
fives_array = np.full(10, 5)

print("Array of 10 zeros:", zeros_array)
print("Array of 10 ones:", ones_array)
print("Array of 10 fives:", fives_array)
```

Array of 10 zeros: [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.]  
 Array of 10 ones: [1. 1. 1. 1. 1. 1. 1. 1. 1. 1.]  
 Array of 10 fives: [5 5 5 5 5 5 5 5 5 5]

In [10]: *# 2. Create a 3x3 matrix with values ranging from 2 to 10*

```
matrix = np.arange(2, 11).reshape(3, 3)
print("3x3 matrix with values from 2 to 10:\n", matrix)
```

3x3 matrix with values from 2 to 10:  
 [[ 2 3 4]  
 [ 5 6 7]  
 [ 8 9 10]]

In [11]: *# 3. Create an array with values ranging from 12 to 38*

```
array_12_to_38 = np.arange(12, 39)
print("Array with values from 12 to 38:", array_12_to_38)
```

Array with values from 12 to 38: [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]

In [13]: *# 4. Convert a list and tuple into arrays*

```
my_list = [1, 2, 3, 4, 5, 6, 7, 8]
my_tuple = ([8, 4, 6], [1, 2, 3])

list_array = np.array(my_list)
tuple_array = np.array(my_tuple)

print("List to array:", list_array, "\n")
print("Tuple to array:\n", tuple_array)
```

List to array: [1 2 3 4 5 6 7 8]

Tuple to array:  
 [[8 4 6]  
 [1 2 3]]

In [ ]: