In [1]:
```
#1. Write a NumPy program to create an array of 10 zeros, 10 ones, and 10 fives

import numpy as np

# Creating the arrays
zeros = np.zeros(10, dtype=int)
ones = np.ones(10, dtype=int)
fives = np.full(10, 5)

# Concatenating all arrays
result = np.concatenate([zeros, ones, fives])

print(result)
```

```
[0 0 0 0 0 0 0 0 0 0 1 1 1 1 1 1 1 1 1 1 5 5 5 5 5 5 5 5 5 5]
```

In [2]:
```
#2. Write a NumPy program to create a 3x3 matrix with values ranging from 2 to 10.
import numpy as np

# Creating a 3x3 matrix with values from 2 to 10
matrix = np.arange(2, 11).reshape(3, 3)

print(matrix)
```

```
[[ 2  3  4]
 [ 5  6  7]
 [ 8  9 10]]
```

In [3]:
```
#3. Write a NumPy program to create an array with values ranging from 12 to 38.
import numpy as np

# Creating an array with values from 12 to 38
array = np.arange(12, 39)

print(array)
```

```
[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 [4]:
```
#4. Write a NumPy program to convert a list and tuple into arrays. Input: my_list = [1, 2, 3,
  #Input: my_tuple = ([8, 4, 6], [1, 2, 3])
import numpy as np

# Given list and tuple
my_list = [1, 2, 3, 4, 5, 6, 7, 8]
my_tuple = ([8, 4, 6], [1, 2, 3])

# Converting to NumPy arrays
array_from_list = np.array(my_list)
array_from_tuple = np.array(my_tuple)

print("Array from list:\n", array_from_list)
print("Array from tuple:\n", array_from_tuple)
```

```
Array from list:
 [1 2 3 4 5 6 7 8]
Array from tuple:
 [[8 4 6]
 [1 2 3]]
```

In [ ]: