**1. Create a NumPy Array**

* Create a 1-dimensional NumPy array with elements [1, 2, 3, 4, 5].
* Create a 2-dimensional NumPy array with the following elements:

[[1, 2, 3],

[4, 5, 6],

[7, 8, 9]]

**2. Array Operations**

* Perform element-wise addition of two arrays: [1, 2, 3] and [4, 5, 6].
* Perform element-wise multiplication of two arrays: [1, 2, 3] and [4, 5, 6].
* Multiply every element in the array [1, 2, 3] by 3.

**3. Array Indexing and Slicing**

* Access the second element in the array [10, 20, 30, 40, 50].
* Slice the array [10, 20, 30, 40, 50] to get elements [20, 30, 40].
* Access the element in the second row and third column of the following array:

[[1, 2, 3],

[4, 5, 6],

[7, 8, 9]]

**4. Array Reshaping**

* Reshape the array [1, 2, 3, 4, 5, 6] into a 2x3 matrix.
* Flatten the 2x3 matrix back into a 1-dimensional array.

**5. Statistical Operations**

* Find the mean, median, and standard deviation of the array [1, 2, 3, 4, 5, 6].
* Find the maximum and minimum values in the array [7, 8, 9, 10, 11].

**6. NumPy Built-in Functions**

* Create an array of zeros with shape (2, 3).
* Create an array of ones with shape (3, 4).
* Create an identity matrix of size 4.

**7. Random Number Generation**

* Generate a random array of 5 numbers between 0 and 1.
* Generate a random 3x3 matrix of integers between 1 and 10.