

# Numpy Code Example

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## 1 Numpy Code Example

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### 1.0.1 Example 1:

Here is a simple example of how to use Numpy to create an array and perform basic operations on it:

```
[1]: import numpy as np

# Create a 1-dimensional array
arr = np.array([1, 2, 3, 4])

# Perform operations on the array
print(arr + 1) # [2, 3, 4, 5]
print(arr * 2) # [2, 4, 6, 8]
```

```
[2 3 4 5]
```

```
[2 4 6 8]
```

### 1.0.2 Example 2:

Here is another example of how to use Numpy to create a 2-dimensional array and perform more advanced operations on it:

```
[2]: import numpy as np

# Create a 2-dimensional array
arr = np.array([[1, 2, 3], [4, 5, 6]])

# Perform operations on the array
print(arr.shape) # (2, 3)
print(arr.mean()) # 3.5
```

```
(2, 3)
```

```
3.5
```

## 1.1 Numpy - Version Check:

You can check the version of Numpy by using the following command:

```
[3]: import numpy  
      print(numpy.__version__)
```

1.21.5

## 1.2 Example - Files:

You can save and load numpy array into a file with numpy functions such as follows: “numpy.save” and “numpy.load”

```
[4]: import numpy as np  
      arr = np.array([1, 2, 3, 4])  
      np.save('my_array', arr)  
      loaded_array = np.load('my_array.npy')
```