

What is NumPy?

NumPy stands for **Numerical Python**.

It's used for:

- Working with large **arrays** and **matrices**
 - Performing **math operations** on arrays
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Installing NumPy

```
pip install numpy
```

Basic NumPy Example

```
import numpy as np

# Create a simple array
my_array = np.array([1, 2, 3, 4, 5])
print("Array:", my_array)

# Perform operations
print("Array * 2:", my_array * 2)      # Multiply each element by 2
print("Mean:", np.mean(my_array))     # Average of the array
print("Square Roots:", np.sqrt(my_array))
```

Practice Task (NumPy)

1. Create an array with numbers 10 to 50.
2. Find the maximum and minimum values.
3. Multiply all elements by 3.