

## Lesson 11: NumPy Basics

Data Science with Python – BSc Course

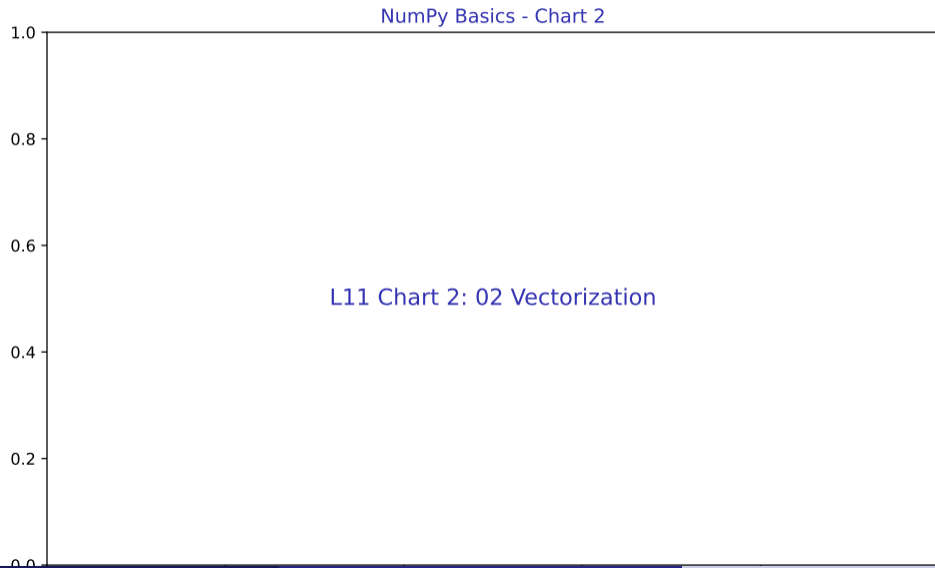
45 Minutes

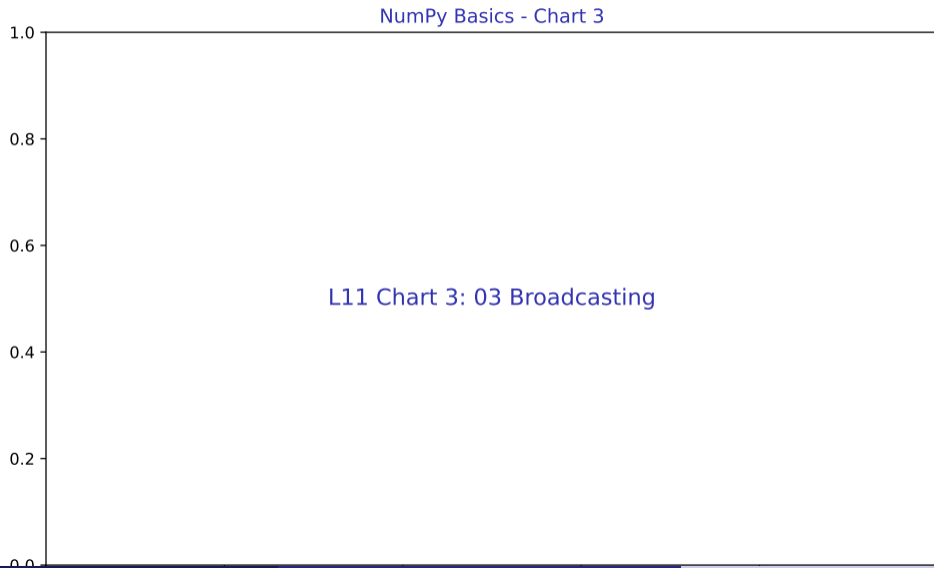
**After this lesson, you will be able to:**

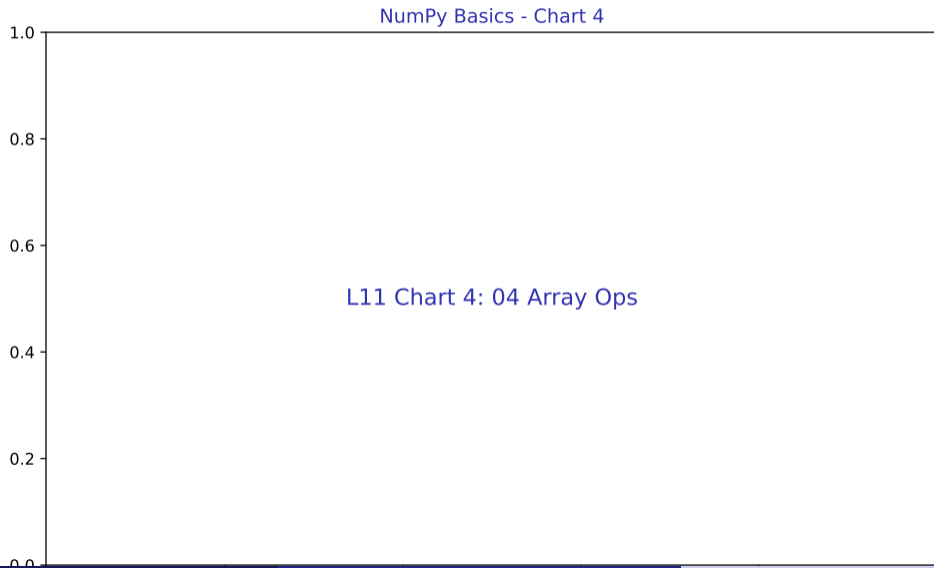
- Arrays vs lists
- Vectorized operations
- Broadcasting
- Mathematical functions
- Portfolio calculations

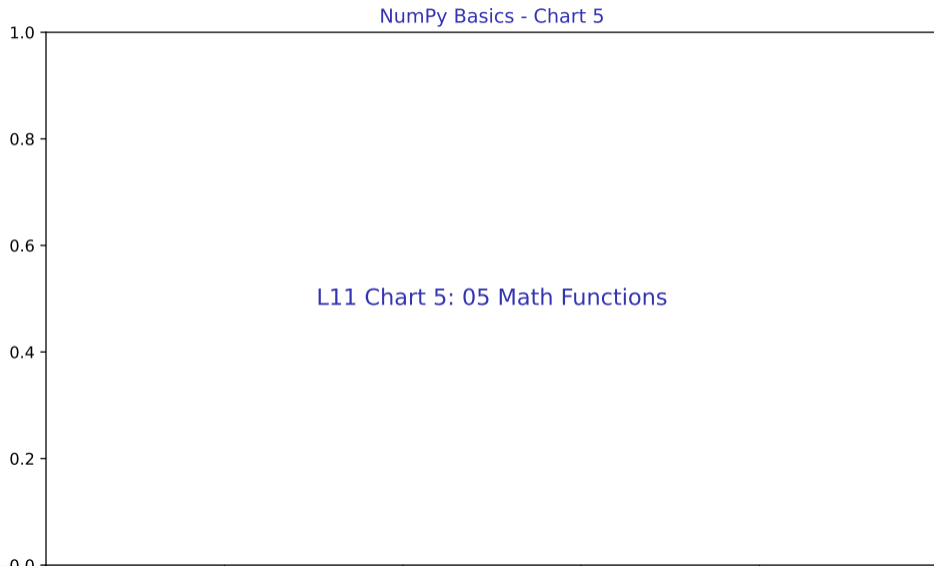
**Finance application: Stock data processing and analysis**

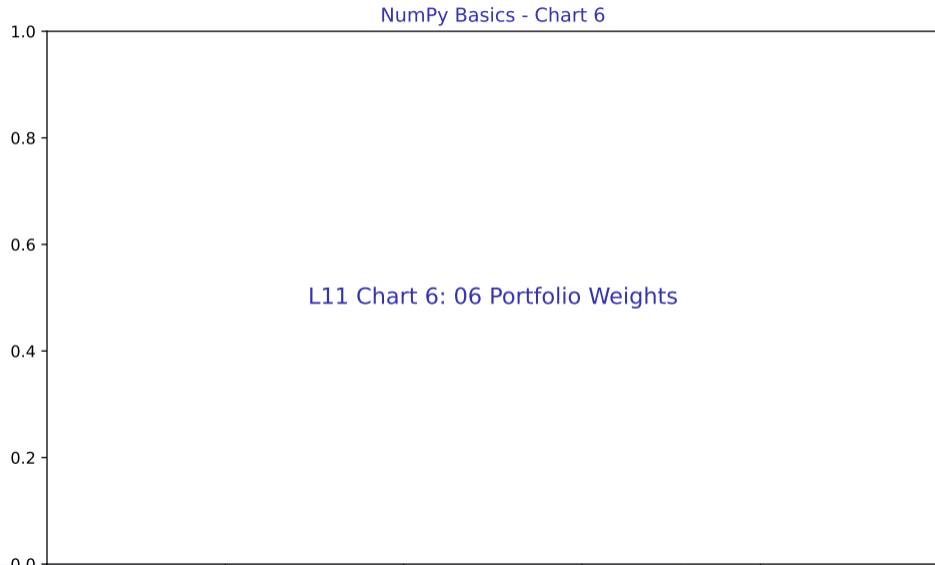


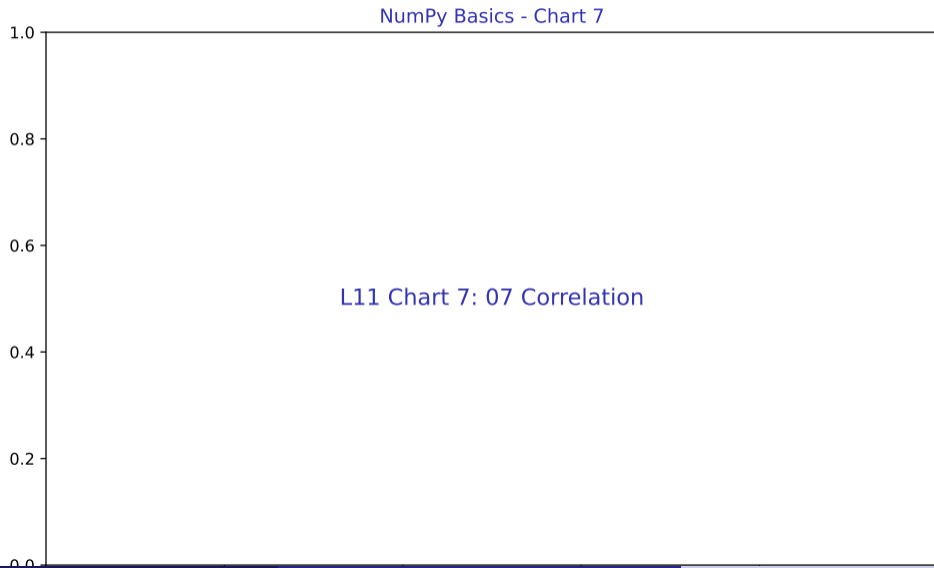


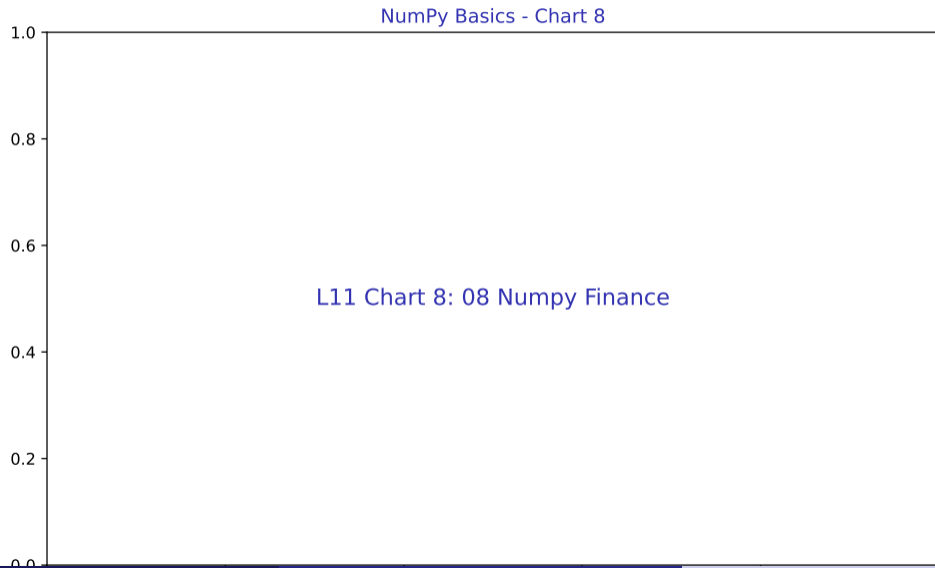












### Key Takeaways:

- Arrays vs lists
- Vectorized operations
- Broadcasting
- Mathematical functions
- Portfolio calculations

**Practice:** Apply these concepts to the stock price dataset.