

**Functions - Array Manipulation and Scope** you will begin by using built-in functions to manipulate arrays and strings. You will then use template literals and fat arrows, introduced in ES6, to code more efficiently. Finally, you will import Boston salary data in a JSON format and manipulate it to find key metrics in the Walk Boston Exercise.

## Learning Outcomes

### Program Learning Outcomes Addressed

- Explain key web programming concepts
- Build web applications using JavaScript, HTML and CSS
- Design and code user interactions on web pages

### By the end of this week, you will be able to:

1. Manipulate arrays and strings in JavaScript
2. Explain how to use string literals in JavaScript
3. Create and use anonymous functions in JavaScript
4. Identify the different JavaScript syntax variations
5. Debug JavaScript code and confirm that your JavaScript variables have the correct data
6. Describe how to import and export JavaScript modules
7. Manipulate JSON data using JavaScript code

## Activities

### Key activities

- Knowledge Checks 4.1 and 4.2
- Discussions
  - String Template Literals
  - Walk Through Boston Data Reflection
- Coding Activities
  - Array Manipulation Activity
  - Working with Fat Arrows in ES6 Activity
- Coding Assignments
  - Walk Through Boston Data Coding Assignment

### Self-study activities

Walk Boston Exercise