Unit 1: Functions, Arrays & Structs

Outline:

- Function Definitions
- Function Calls
- `return` Statements and void Functions
- Function Prototypes
- Parameters and Arguments
- Pass by Value, Pass by Reference
- Local and Global Variables
- Array Declarations, Initialization, and Array Elements
- Processing Arrays
- Passing Arrays to Functions
- Structure Definition & Variable Declarations
- Accessing Members
- Structure Operations
- Arrays of Structures
- Overloaded Functions and Default Arguments

Textbook Chapters:

- Gaddis: Chapter 6 (6.1-5, 6.7-10 and 6.13) (see also 6.12+6.14)
- Gaddis: Chapter 7 (7.1-4, 7.6, 7.8)
- Gaddis: Chapter 11 (11.2-5, 11.7-8)

Practice Problems:

- Gaddis, Chapter 6, Programming Challenges:
  - 3 Winning Division (don’t do Input Validation)
  - 7 Celsius Temperature Table

- Gaddis, Chapter 7, Programming Challenges:
  - 3 Chips and Salsa (use functions to find highest and lowest selling products)
  - 10 Drivers License Exam (don’t do Input Validation)

- Gaddis, Chapter 11, Programming Challenges:
  - 1 Movie Data
  - 6 Soccer Scores (use functions for each task, don’t do Input Validation)