

## Practice

1. Arrays and Pointers:
  - a. Declare an integer array named **scores** with a size of 5.
  - b. Create a character array named **name** to store a person's name.
  - c. Declare a float array named **temperatures** with 10 elements.
  - d. Create an array of strings named **daysOfWeek** representing the days of the week.
  - e. Declare a two-dimensional array named **matrix** with 3 rows and 4 columns.
2. Declaring and Accessing Arrays:
  - a. Initialize the **scores** array with some sample test scores.
  - b. Input the name into the **name** array using cin.
  - c. Set values in the **temperatures** array using a loop.
  - d. Initialize the **daysOfWeek** array with the names of the days.
  - e. Assign values to the elements of the **matrix** using nested loops.
3. Array Manipulation and Traversal:
  - a. Calculate the average of the **scores** array.
  - b. Convert all characters in the **name** to uppercase.
  - c. Find the highest temperature in the **temperatures** array.
  - d. Print the days of the week in reverse order.
  - e. Transpose the **matrix** (swap rows and columns).
4. Introduction to Pointers and Their Role:
  - a. Declare a pointer variable to an integer named **ptr**.
  - b. Assign the address of an integer variable to the pointer **ptr**.
  - c. Use the pointer to modify the value of the integer variable.
  - d. Create a pointer to an array and access its elements.
  - e. Write a function that takes a pointer to an integer and doubles its value.