

CECS 174 – Assignment 11

Arrays -

Write a program that prompts the user for any 10 integer values. Place these 10 values into an array.

Display a menu to the user that will let them choose from several different functions that operate on the array of values that they inputted.

Menu Options:

1. Display Numbers – display the contents of the array on one line separated by spaces or commas.
2. Display Reversed Numbers – display the contents of the array backwards (don't actually reverse the array, just display it in reverse order).
3. Display Specific Value – have the user input a location, then output the value at that location (assume the user begins counting at 1). Check that their entry is not a string and it is not out of bounds of the array.
4. Find Value – have the user input a value. Locate that value in the array and display the location back to the user (assume the user begins counting from 1). If the value is not in the array, state that it does not exist.
5. Insert Value – have the user input a location and a value. Overwrite the value at that location with the new one.
6. Input New Values – Allows the user to input a new set of 10 values.
7. Quit – Quit the program.

Repeat the program until the user decides to quit. Check all user input for invalid values.

Extra Credit – Add the following menu options for 1 point of extra credit.

1. Compute Sum – add up all of the values in the array.
2. Compute Average – divide the sum by the number of elements to compute the average.
3. Maximum Value – iterate through the array to find the largest value.