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ECE 1310.04

Homework 12

1. 6.6 Fill in the blanks for each of the following:
   1. The names of the four elements of array p (int p[4];) are \_0\_, \_1\_, \_2\_, and \_3\_.
   2. Naming an array, stating its type and specifying the number of elements in the array is called \_initializing\_ the array.
   3. By convention, the first subscript in a two-dimensional array identifies an element’s \_row\_ and the second subscript identifies an element’s \_column\_.
   4. An *m*-by-*n­* array contains \_m\_ rows, \_n\_ columns, and \_m\*n\_ elements.
   5. The name of the element in row 3 column 5 of array d is \_d3 5\_.
2. 6.8 Write C++ statements to accomplish each of the following:
   1. Display the value of element 6 of character array f.

cout << f[6];

* 1. Input a value into element 4 of one-dimensional floating-point array b.

int val;

cin >> val;

b[4] = val;

* 1. Initialize each of the 5 elements of one-dimensional integer array g to 8.

int g[5] = {8, 8, 8, 8, 8};

* 1. Total and print the elements of floating-point array c of 100 elements.

float sum = 0;

cout << "Index\tElement\tSum\n";

for (int i = 0; i < 100; i++)

{

sum += c[i];

cout << " " << i << "\t " << c[i] << "\t " << sum << endl;

}

cout << "Total: " << sum;

* 1. Copy array a into the first portion of array b. Assume double a[11], b[34];

for int(i = 0; i < 11; i++)

{

b[i] = a[i];

}

* 1. Determine and print the smallest and largest values contained in 99-element floating-point array w.

float smallest, largest;

smallest = w[0];

largest = w[0];

for (int i = 1; i < 99; i++)

{

if (w[i] <= smallest)

smallest = w[i];

else if (w[i] >= largest)

largest = w[i];

}

cout << "Smallest: " << smallest << " Largest: " << largest << endl;

1. 6.13 Write single statements that perform the following one-dimensional array operations:
   1. Initialize the 10 elements of integer array counts to zero.

for (int i = 0; i < 10; i++)

counts[i] = 0;

* 1. Add 1 to each of the 15 elements of integer array bonus.

for (int i = 0; i < 15; i++)

bonus[i] += 1;

* 1. Read 12 values for double array monthlyTemperatures from the keyboard.

for (int i = 0; i < 12; i++)

cin >> monthlyTemperatures[i];

* 1. Print the 5 values of integer array bestScores in column format.

for (int i = 0; i < 15; i++)

cout << bestScores[i] << endl;