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Module 1 Review Questions and Exercises (Chapter 8):

8. If a numeric array is partially initialized, the uninitialized elements will be set to zero.

19. When a two-dimensional array is passed to a function, the number of columns, must be specified.

In C++ one row follows the next row while storing the two-dimensional array in memory. So it needs to specify the number of columns in the two-dimensional array in the function prototype and the function header. The complier tries to know the number of bytes separate the rows in the memory while accessing the elements of the two-dimensional array. Therefore the number of columns in the two-dimensional array must specify while passing the two-dimensional array to the functions.

25. vector<int> vec2; is legal.

vector<int> vec2(10); is legal.

vector<int> vec2(10, 100); is legal.

vector<int> vec2(vec1); is legal.

vector<int> vec2(vec1.size()); is legal.

31. //code that copies the elements in the array 1 to array 2:

Int array1[25];

Int array2[25];

For(int i = 0; i < 25; i++)

{

array2[i] = array1[i];

}

32. The given code does not print the correct totals the vales of both the arrays due to the following reasons: first, observe the loops used in the given code. It is specified that the arrays Array1 and Array2 both contain 25 elements. To find the totals of each array, the loop is executed as, for(count = 0; count < 24; count++) So, the loop is executed for 23 elements, the last element is not added up. Thus, the total value is computed wrongly. In order to find the correct totals of both the arrays, the loops must be executed from 0 to 24 inclusively or must be executed 0 to less than 25.

Second, the other issue is while computing the total for the elements present in the second array. The total that is computed for the elements of the first array is stored in the variable total. At, the second for loop, the value stored, in total variable is not set to zero before computing the total value of elements of the second array. So, to the existing total value present in the total variable, the values of the second array elements are being added up. Thus, the total value calculated for the second array elements produces wrong total value.