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// This program uses a function to double the value of
// each element of an array.
#include <iostream>
using namespace std;

// Function prototypes
void doubleArray(int [], int);
void showValues(int [], int);

int main()
{
    const int ARRAY_SIZE = 7;
    int set[ARRAY_SIZE] = {1, 2, 3, 4, 5, 6, 7};

    // Display the initial values.
    cout << "The arrays values are:\n";
    showValues(set, ARRAY_SIZE);

    // Double the values in the array.
    doubleArray(set, ARRAY_SIZE);

    // Display the resulting values.
    cout << "After calling doubleArray the values are:\n";
    showValues(set, ARRAY_SIZE);

    return 0;
}

//*****
// Definition of function doubleArray *
// This function doubles the value of each element *
// in the array passed into nums. The value passed *
// into size is the number of elements in the array. *
//*****

void doubleArray(int nums[], int size)
{
    for (int index = 0; index < size; index++)
        nums[index] *= 2;
}

//*****
// Definition of function showValues. *
// This function accepts an array of integers and *
// the array's size as its arguments. The contents *
// of the array are displayed. *
//*****

void showValues(int nums[], int size)
{
    for (int index = 0; index < size; index++)
        cout << nums[index] << " ";
    cout << endl;
}

```