

WRITE A PROGRAM TO  
CREATE AN ARRAY OF 50  
ELEMENTS, INITIALIZE  
EACH ELEMENT *RANDOM*  
*VALUE (1 TO 100)*. FIND  
THE *LOCATION (INDEX) OF*  
*THE LARGEST VALUE*. IN  
THE END, PRINT BOTH THE  
INDEX AND LARGEST  
VALUE.

```

#include <iostream>
using namespace std;
int main() {

    int i,maxindex=0,minindex=0;
    float array[50], avg = 0.0, sum = 0.0, larg, small;
    for (i = 0; i < 50; i++) {
        //cin >> array[i];
        array[i] = rand() % 500;
        cout << "arr[" << i << "]: " << array[i] << endl;
        sum += array[i];
    }

    avg = sum / 50;
    cout << "\nThe Sum is:\t" << sum;
    cout << "\nThe Total Average is:\t" << avg;
    larg = array[0];

    for (i = 1; i < 50; i++) {
        if (larg < array[i])
        {
            larg = array[i];
            maxindex = i;
        }
    }
    avg = larg / 50;

    cout << "\narr[" << maxindex << "]: " << larg;
    cout << "\nThe Largest Number Average is:\t" << avg;

    small = array[0];

    for (i = 1; i < 50; i++) {
        if (small > array[i])
        {
            small = array[i];
            minindex = i;
        }
    }
    avg = small / 50;
    cout << "\narr[" << minindex << "]: " << small;
    cout << "\nThe Smallest Number Average is:\t" << avg;

}

```