

**WRITE A PROGRAM THAT  
CREATES AN INTEGER  
ARRAY HAVING 50  
ELEMENTS. THEN, ASK THE  
USER TO INPUT VALUES IN  
THE ARRAY. AFTER THAT,  
FIND THE LARGEST  
NUMBER, SMALLEST  
NUMBER IN THE AND  
CALCULATE THE AVERAGE  
OF THE VALUES IN THE  
ARRAY.**

```

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

    int i;
    float array[50], avg=0.0, sum = 0.0, larg, small;
    for (i = 0; i < 50; i++) {
        //cin >> array[i];
        array[i] = rand() % 500 + 1;
        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];
        }
    }
    avg = larg / 50;

    cout << "\nthe largest number is:\t" << 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];
        }
    }
    avg = small / 50;
    cout << "\nthe smallest number is:\t" << small;
    cout << "\nthe smallest number average is:\t" << avg;

}

```