

## Pointers and Arrays

```
// arrnote.cpp
// array accessed with array notation
#include <iostream>
using namespace std;

int main()
{
    int intarray[5] = { 31, 54, 77, 52, 93 }; //array

    for(int j=0; j<5; j++) //for each element,
        cout << intarray[j] << endl; //print value
    return 0;
}

// array accessed with pointer notation
#include <iostream>
using namespace std;

int main()
{
    int intarray[5] = { 31, 54, 77, 52, 93 }; //array

    for(int j=0; j<5; j++) //for each element,
        cout << *(intarray+j) << endl; //print value
    return 0;
}

// passarr.cpp
// array passed by pointer
#include <iostream>
using namespace std;
const int MAX = 5; //number of array elements

int main()
{
    void centimize(double*); //prototype

    double varray[MAX] = { 10.0, 43.1, 95.9, 59.7, 87.3 };

    centimize(varray); //change elements of varray to cm

    for(int j=0; j<MAX; j++) //display new array values
        cout << "varray[" << j << "]= "
            << varray[j] << " centimeters" << endl;
    return 0;
}
//-----
void centimize(double* ptrd)
{
    for(int j=0; j<MAX; j++)
        *ptrd++ *= 2.54; //ptrd points to elements of varray
}
```

