

Ca7-1 Arrays

Filename: ca7-1a.cpp

This program that reads 10 numbers into an array and prints them out.

```
// Name: John Smith
// This program uses a function
#include <iostream>
using namespace std;
int main()
{   int num[10];

    // read the numbers into an array
    for ( i = 0; i<10 ; ++i)
    {
        cin>>num[i];
    }

    // print out the numbers
    cout<<" Our List of Numbers"<<endl;
    for ( i = 0; i<10 ; ++i)
    {
        cout<<num[i]<<" ";
    }
    cout<<endl;

    return 0;
}
```

Write a program that will read in 15 numbers into an array. Then print out the 15 numbers

Filename: ca7-1b.cpp

This program reads in a list of numbers, print out the list, then triple each number, then print out list again. Since we read the numbers into the array first, we can use a for loop to go through all of the numbers several times.

Example Program: double each number

```
// Name: John Smith
// This program uses a function
```

```

#include <iostream>
using namespace std;
int main()
{   int num[10];

    //read in each number
    for ( i = 0; i<10 ; ++i)
    {
        cin>>num[i];
    }
    //print out each number

    cout<<" Our original List of Numbers"<<endl;
    for ( i = 0; i<10 ; ++i)
    {
        cout<<num[i]<<" ";
    }
    cout<<endl;

    //go thru the list and double each number
    for ( i = 0; i<10 ; ++i)
    {
        num[i] = num[i] * 2;
    }

    // print out the numbers
    cout<<" Our List of Numbers doubled"<<endl;
    for ( i = 0; i<10 ; ++i)
    {
        cout<<num[i]<<" ";
    }
    cout<<endl;

    return 0;
}

```

Write program reads in a list of 20 numbers, print out the list, then multiply each number by 10, then print out list again. Since we read the numbers into the array first, we can use a for loop to go though all of the numberseveral times.