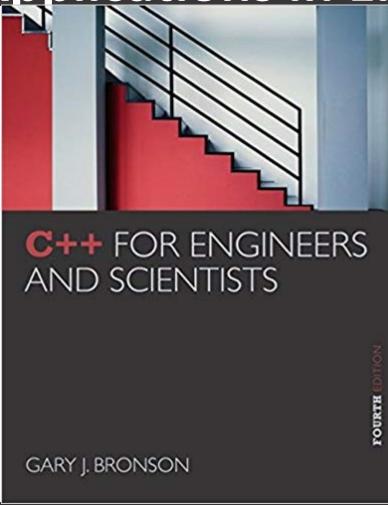
ELEG 1043

Computer Applications in Engineering



C++ for Engineers and Scientists, Fourth Edition



Lab Course 6

C++ FOR ENGINEERS AND SCIENTISTS ²

Acknowledgement

 Some of the slides or images are from various sources. The copyright of those materials belongs to their original owners.



Chapter 7: Arrays

C++ FOR ENGINEERS AND SCIENTISTS

Exercise 1

 Write a program to input 10 positive integer numbers in an array named Minimum and determine and display the Minimum value entered, where the numbers are received from keyboard

Answer

```
#include <iostream>
using namespace std;
int main(){
   int Minimum[10] = \{0\};
   int minNum = 10000; \\ assign a large number
   for(int i = 0; i < 10; i++)
   \{ int num = -1; \}
     cin>>num;
     Minimum[i] = num;
     if(minNum < num)</pre>
     {minNum = num;}
   cout<<minNum<<endl;
   return 0;}
```

Exercise 2

 Write a program to build a function named multiply to input the following integer numbers in an array named grades: 12.3, 16.4, and 30.6. As each number is input, multiply the numbers to a variable mult and return the mult value.

Answer

```
#include <iostream>
using namespace std;
void multiply(int arr[], int length);
int main(){
    double arr[5] = \{12.3, 16.4, 30.6\};
    cout<< multiply(arr, 3);</pre>
    return 0;
void multiply(int arr[], int length);{
     int mul = 1.0;
    for(int i = 0; i < length; i++){
        mul = mul*arr[i];
    return mul;
```



Chapter 10: Pointers

C++ FOR ENGINEERS AND SCIENTISTS

Exercise 3

• Write a declaration to store the following values in an array named **Array**: 1,2,3,4, and 5. Include the declaration in a program that displays the values in the array by using **pointer notation**.

Answer

```
#include <iostream>
using namespace std;
int main()
   int Array[5] = \{1,2,3,4,5\};
   int * pointer = Array;
   for(int i = 0; i < 5; i++)
        cout<<*(pointer + i)<<endl;</pre>
   return 0;
```