ELEG 1043
Computer Applications in Engineering

Lab Course 6

Acknowledgement

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Chapter 7:
Arrays

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

```cpp
#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)
      {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

```cpp
#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);
    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
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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

```cpp
#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;
    }
    return 0;
}
```