

Assignment 2 Lab

Q1.To input an integer array and find the maximum and minimum elements in the array using if and conditions.

Code:-

```
//Program to find the maximum and minimum element in an array
//AC-1216 Harsh Bamotra

#include <iostream>
using namespace std;

int main()

{

    int numbers[5] , num , max , min;           //defining array and variables
    for(int i=0 ; i<5 ; i++)
    {
        cout << "Enter the numbers::";    //Taking array elements form the user
        cin >> num;
        numbers[i]=num;
    }

    cout << "The array you entered::";
    for(int i=0 ; i<5 ; i++)
    {
        cout << numbers[i] << " ";        //Displaying the inputted array
    }
```

```
cout << endl;
max=numbers[0];
min=numbers[0];           //Initializing max and min
for(int i=0 ; i<5 ; i++)
{
    if(max<numbers[i])
    {
        max=numbers[i];       //checking for the largest number
    }


    if(min>numbers[i])
    {
        min=numbers[i];       //checking for the smallest number
    }
}

cout << "The largest number::" << max << endl;       //printing the largest number
cout << "The smallest number::" << min << endl;       //printing the smallest number

return 0;

}
```

Output:-

 Command Prompt

```
Microsoft Windows [Version 10.0.19042.630]
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C:\Users\harsh>cd desktop

C:\Users\harsh\Desktop>cd AC-1216_c++

C:\Users\harsh\Desktop\AC-1216_c++>g++ array.cpp -o array.exe

C:\Users\harsh\Desktop\AC-1216_c++>array.exe
Enter the numbers::12
Enter the numbers::1
Enter the numbers::23
Enter the numbers::4
Enter the numbers::5
The array you entered::12 1 23 4 5
The largest number::23
The smallest number::1

C:\Users\harsh\Desktop\AC-1216_c++>_
```

Q2.To input a double array and calculate the sum of all the elements of the array.

Code:-

```
//Program to calculate the sum of all the elements of the array
//AC-1216 Harsh Bamotra

#include <iostream>
using namespace std;

int main()
{

    double numbers[5] , num , sum=0;           //defining array and variables
    for(int i=0 ; i<5 ; i++)
    {
        cout << "Enter the numbers::";    //Taking array elements form the user
        cin >> num;
        numbers[i]=num;
        sum+=numbers[i];           //calculating the sum
    }
    cout << "The array you entered::";
    for(int i=0 ; i<5 ; i++)
    {
        cout << numbers[i] << " ";           //Displaying the inputed array
    }
    cout << endl;
    cout << "The sum of all the elements::" << sum;    //printing the sum
    return 0;
}
```

Output:-

```
Command Prompt
Microsoft Windows [Version 10.0.19042.630]
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C:\Users\harsh>cd desktop

C:\Users\harsh\Desktop>cd AC-1216_c++

C:\Users\harsh\Desktop\AC-1216_c++>g++ sum_array.cpp -o sum_array.exe

C:\Users\harsh\Desktop\AC-1216_c++>sum_array.exe
Enter the numbers::12
Enter the numbers::32
Enter the numbers::3
Enter the numbers::4
Enter the numbers::6
The array you entered::12 32 3 4 6
The sum of all the elements::57
C:\Users\harsh\Desktop\AC-1216_c++>
```

Q3.To declare a character array and initialize it with hello world and print the character array without using gets and puts.

Code:-

```
//Program to declare and initialize a character array and print it
//Harsh Bamotra AC-1216

#include <iostream>
using namespace std;

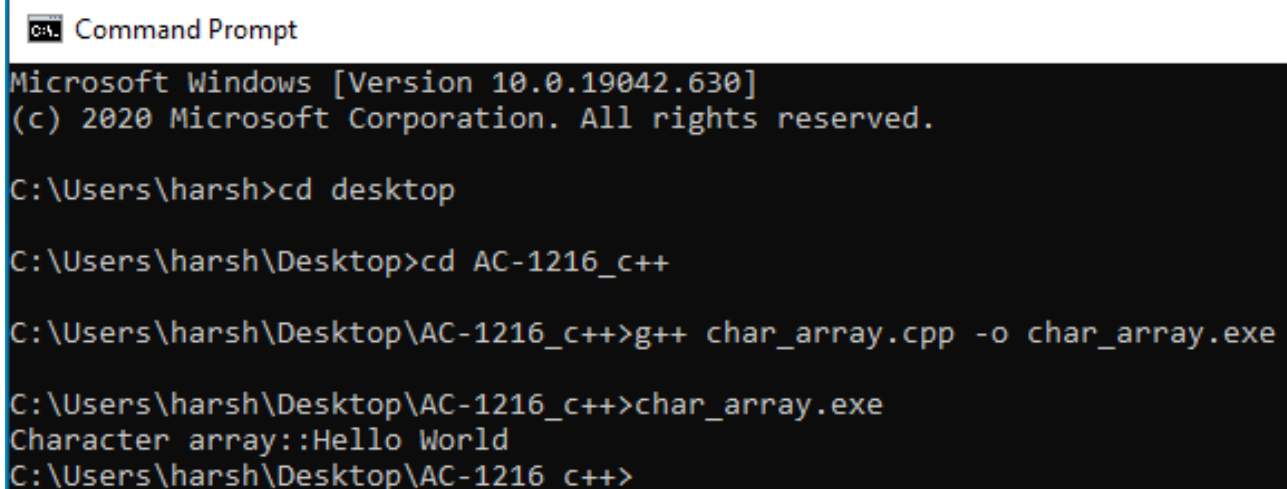
int main()

{

    char arr[20]={'H','e','l','l','o',' ','W','o','r','l','d'};    //Declaring and initializing array
    cout << "Character array::" << arr;                          //Printing the array
    return 0;

}
```

Output:-



```
Command Prompt
Microsoft Windows [Version 10.0.19042.630]
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C:\Users\harsh>cd desktop
C:\Users\harsh\Desktop>cd AC-1216_c++
C:\Users\harsh\Desktop\AC-1216_c++>g++ char_array.cpp -o char_array.exe
C:\Users\harsh\Desktop\AC-1216_c++>char_array.exe
Character array::Hello World
C:\Users\harsh\Desktop\AC-1216_c++>
```

