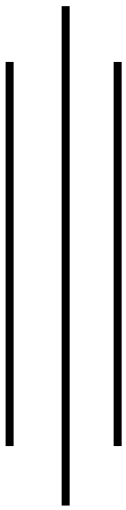
Chandpur Science and Technology University

Department of Computer Science and Engineering

LAB ASSIGNMENT #4



C Lab Assignment Submitted By:

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Submitted To:

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Lab Date:

Submission Date: 15/12/2023

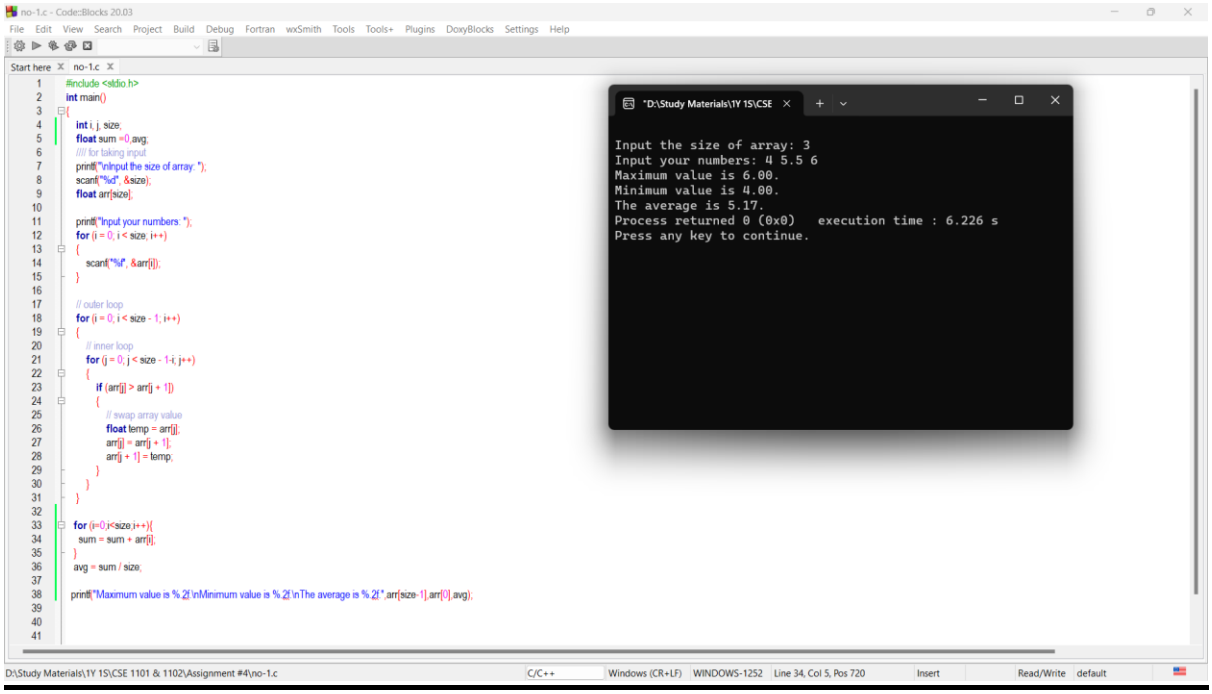
Marks & Signature

Problem No – 1

Title:

Write a program to find the maximum, minimum and average from a list of floating point numbers.

Code and Output:

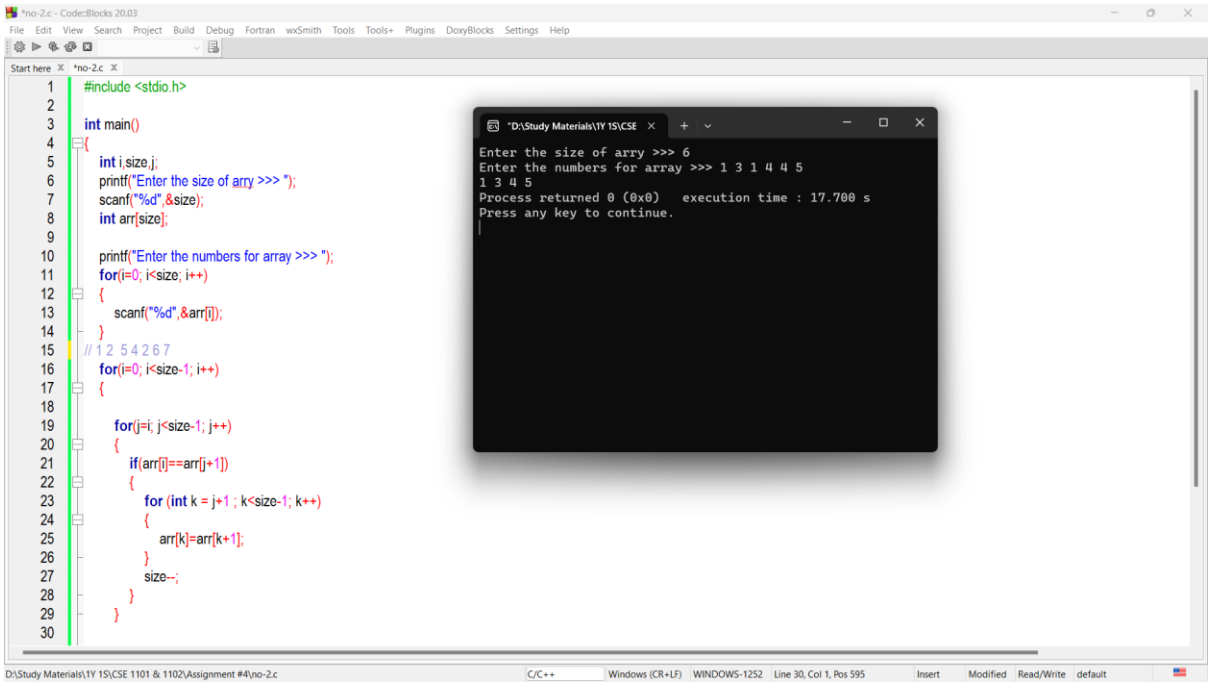


Problem No – 2

Title:

Write a program to delete duplicate elements from an array.

Code and Output:



```c
#include <stdio.h>

int main()
{
    int i,size,j;
    printf("Enter the size of arry >>> ");
    scanf("%d",&size);
    int arr[size];

    printf("Enter the numbers for array >>> ");
    for(i=0; i<size; i++)
    {
        scanf("%d",&arr[i]);
    }
  //1 2 5 4 2 6 7
    for(i=0; i<size-1; i++)
    {

        for(j=i; j<size-1; j++)
        {
            if(arr[i]==arr[j+1])
            {
                for (int k = j+1 ; k<size-1; k++)
                {
                    arr[k]=arr[k+1];
                }
                size--;
            }
        }

```

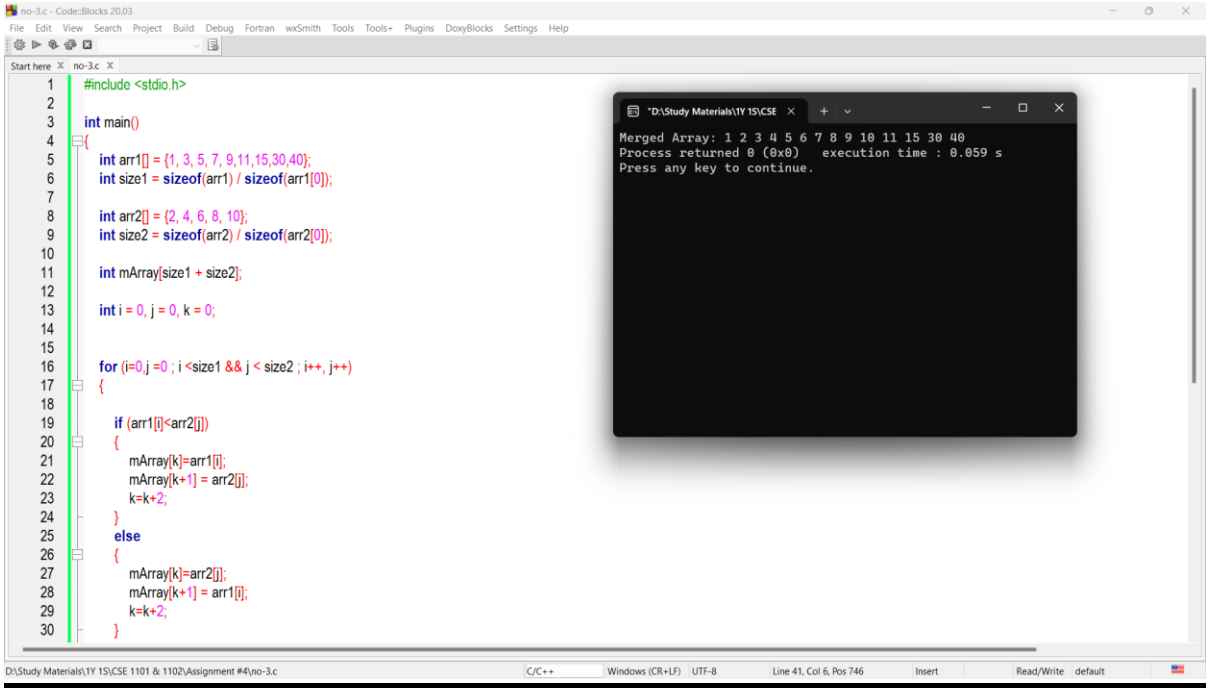
```
"D:\Study Materials\1Y 1S\CSE
Enter the size of arry >>> 6
Enter the numbers for array >>> 1 3 1 4 4 5
1 3 4 5
Process returned 0 (0x0)   execution time : 17.700 s
Press any key to continue.
```

Problem No – 3

Title:

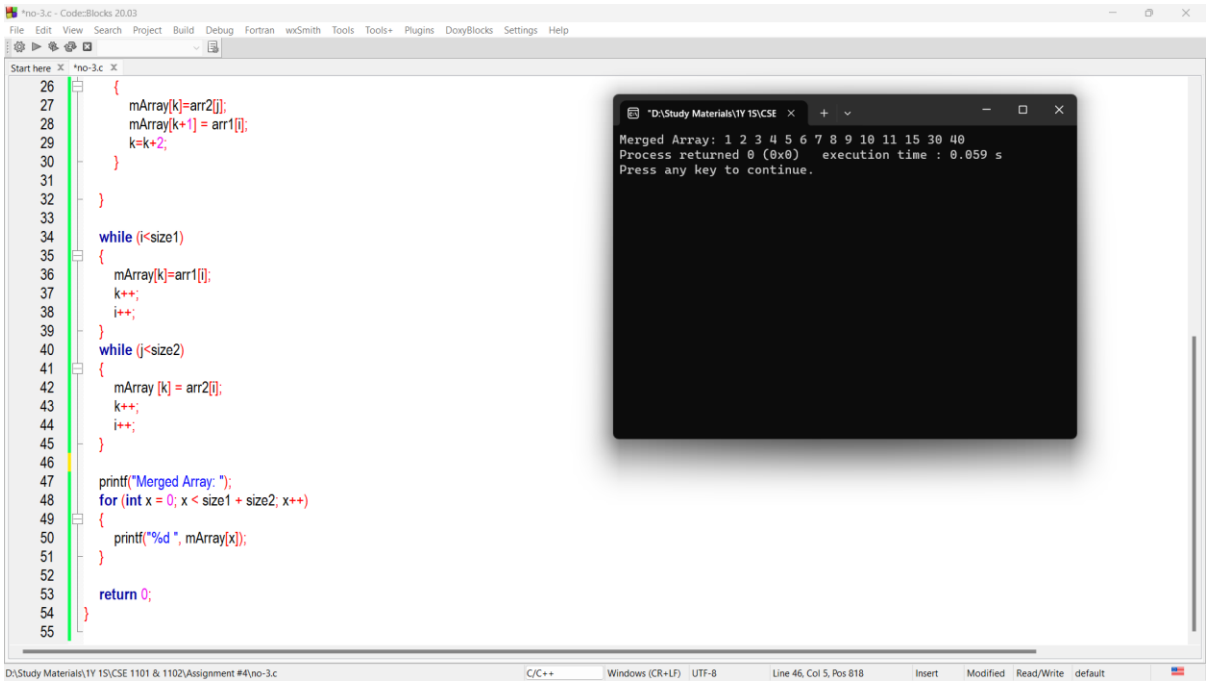
Write a program to merge two sorted arrays.

Code and Output:



```c
#include <stdio.h>

int main()
{
    int arr1[] = {1, 3, 5, 7, 9,11,15,30,40};
    int size1 = sizeof(arr1) / sizeof(arr1[0]);

    int arr2[] = {2, 4, 6, 8, 10};
    int size2 = sizeof(arr2) / sizeof(arr2[0]);

    int mArray[size1 + size2];

    int i = 0, j = 0, k = 0;


    for (i=0,j =0 ; i <size1 && j < size2 ; i++, j++)
    {

       if (arr1[i]<arr2[j])
       {
          mArray[k]=arr1[i];
          mArray[k+1] = arr2[j];
          k=k+2;
       }
       else
       {
          mArray[k]=arr2[j];
          mArray[k+1] = arr1[i];
          k=k+2;
       }
```

```
"D:\Study Materials\1Y 1S\CSE
Merged Array: 1 2 3 4 5 6 7 8 9 10 11 15 30 40
Process returned 0 (0x0)   execution time : 0.059 s
Press any key to continue.
```



```c
       {
          mArray[k]=arr2[j];
          mArray[k+1] = arr1[i];
          k=k+2;
       }

    }

    while (i<size1)
    {
       mArray[k]=arr1[i];
       k++;
       i++;
    }
    while (j<size2)
    {
       mArray [k] = arr2[i];
       k++;
       i++;
    }

    printf("Merged Array: ");
    for (int x = 0; x < size1 + size2; x++)
    {
       printf("%d ", mArray[x]);
    }

    return 0;
}
```

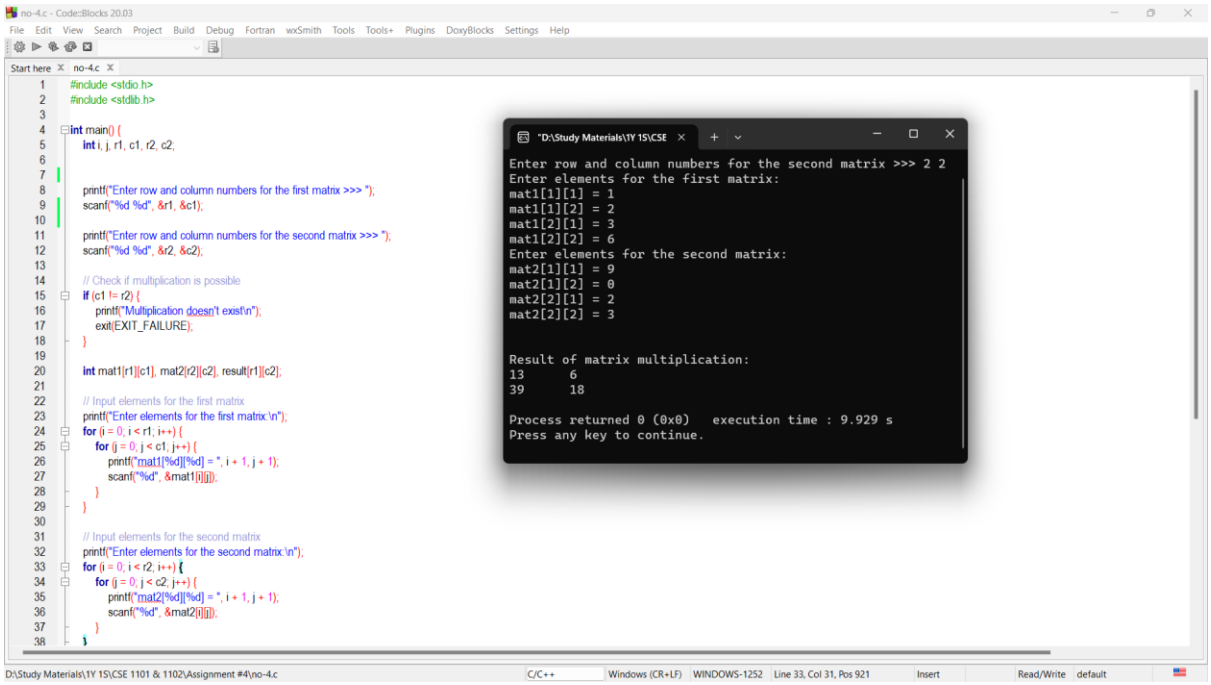
```
"D:\Study Materials\1Y 1S\CSE
Merged Array: 1 2 3 4 5 6 7 8 9 10 11 15 30 40
Process returned 0 (0x0)   execution time : 0.059 s
Press any key to continue.
```

Problem No – 4

Title:

Write a program to read two matrixes from user into two different 2D array and multiply these two matrixes and finally display the result.

Code and Output:

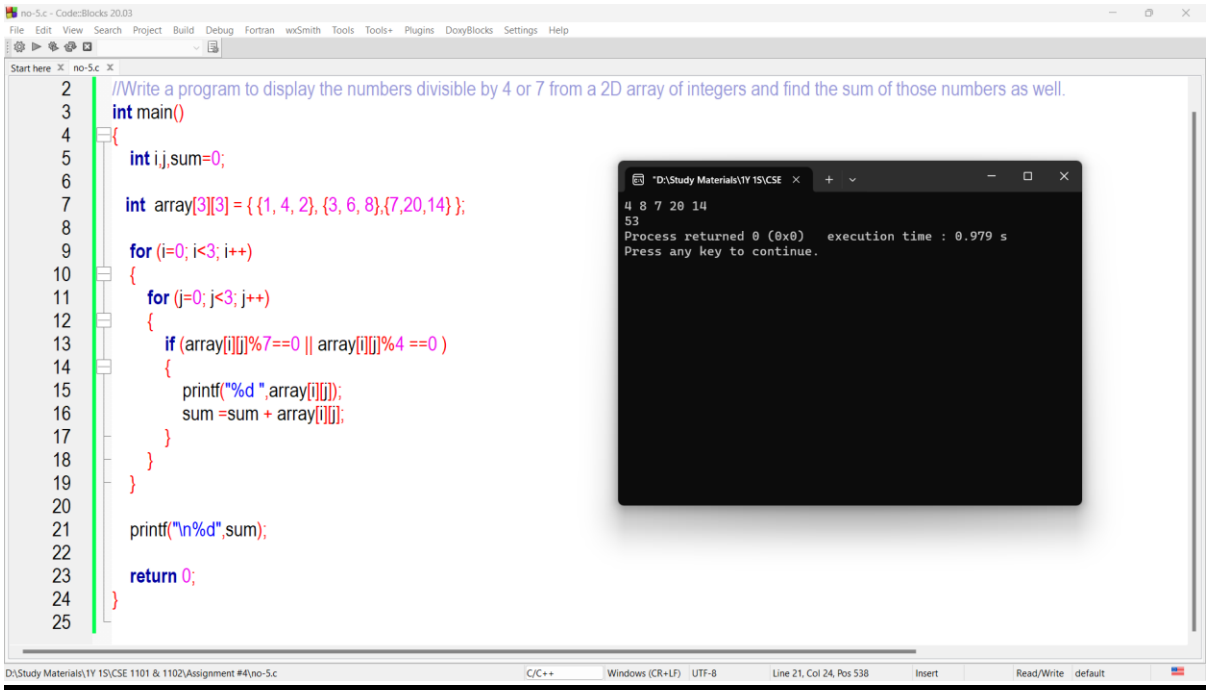


Problem No – 5

Title:

Write a program to display the numbers divisible by 4 or 7 from a 2D array of integers and find the sum of those numbers as well.

Code and Output:

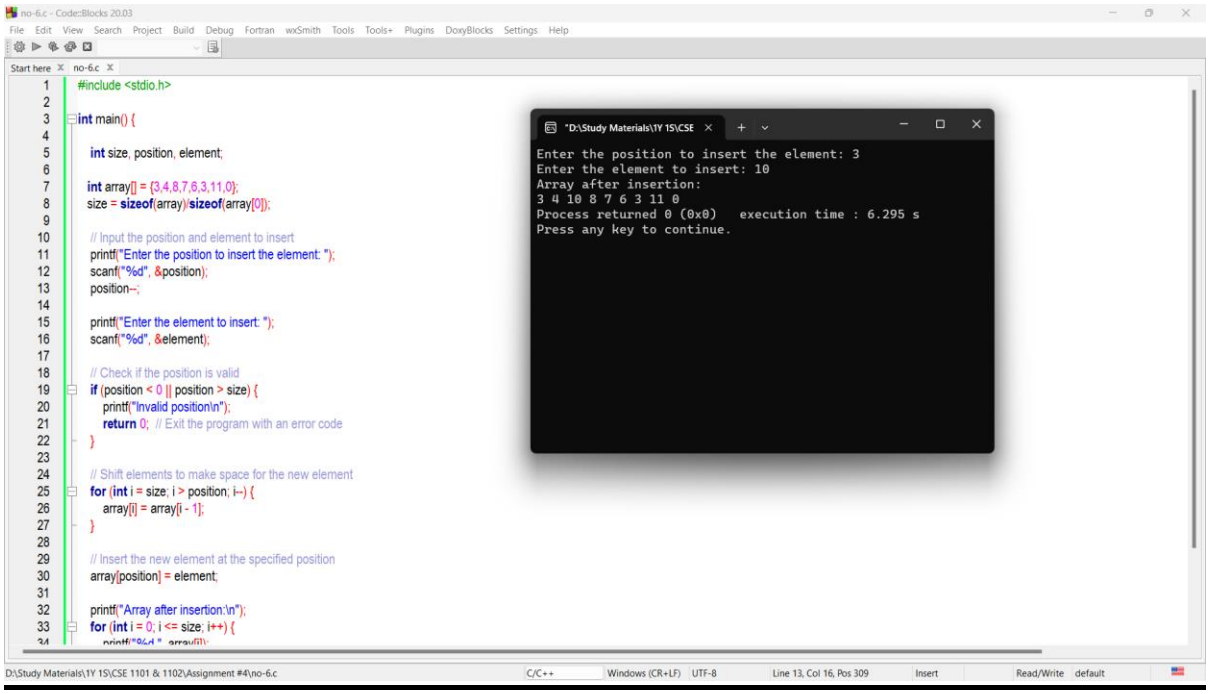


Problem No – 6

Title:

Write a program insert an Element Desired or Specific Position in an Array.

Code and Output:



Problem No – 7

Title:

Write a program delete Element from an Array at a Desired or Specific Position.

Code and Output: