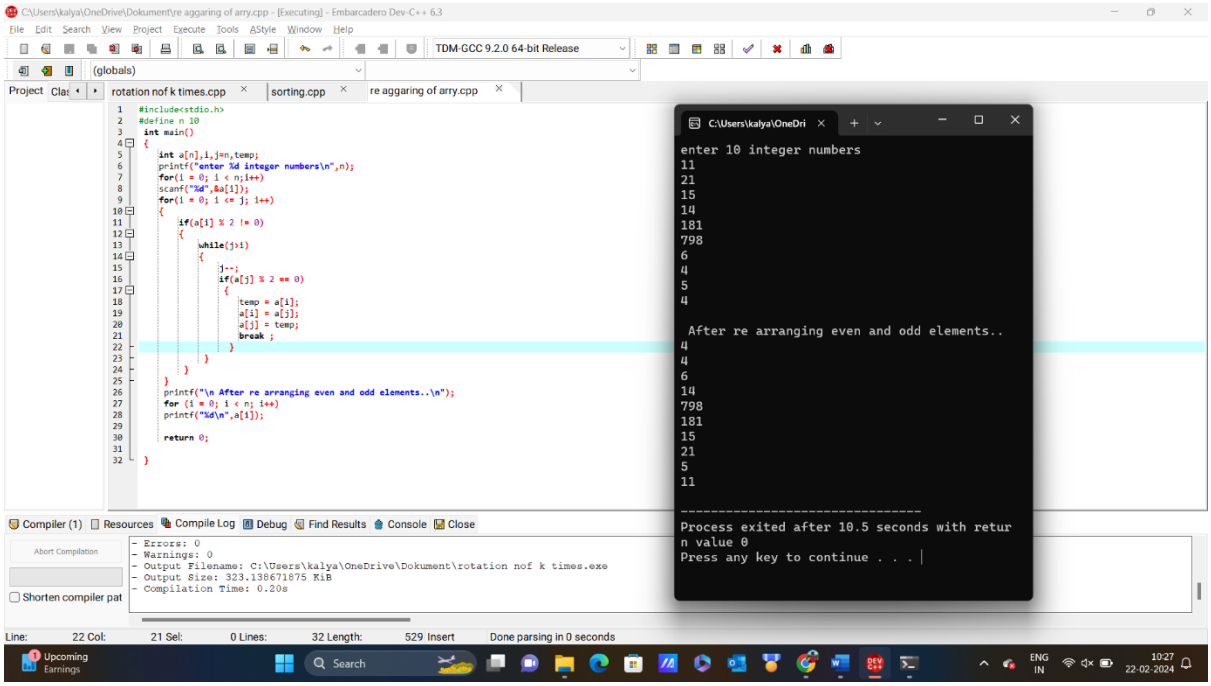
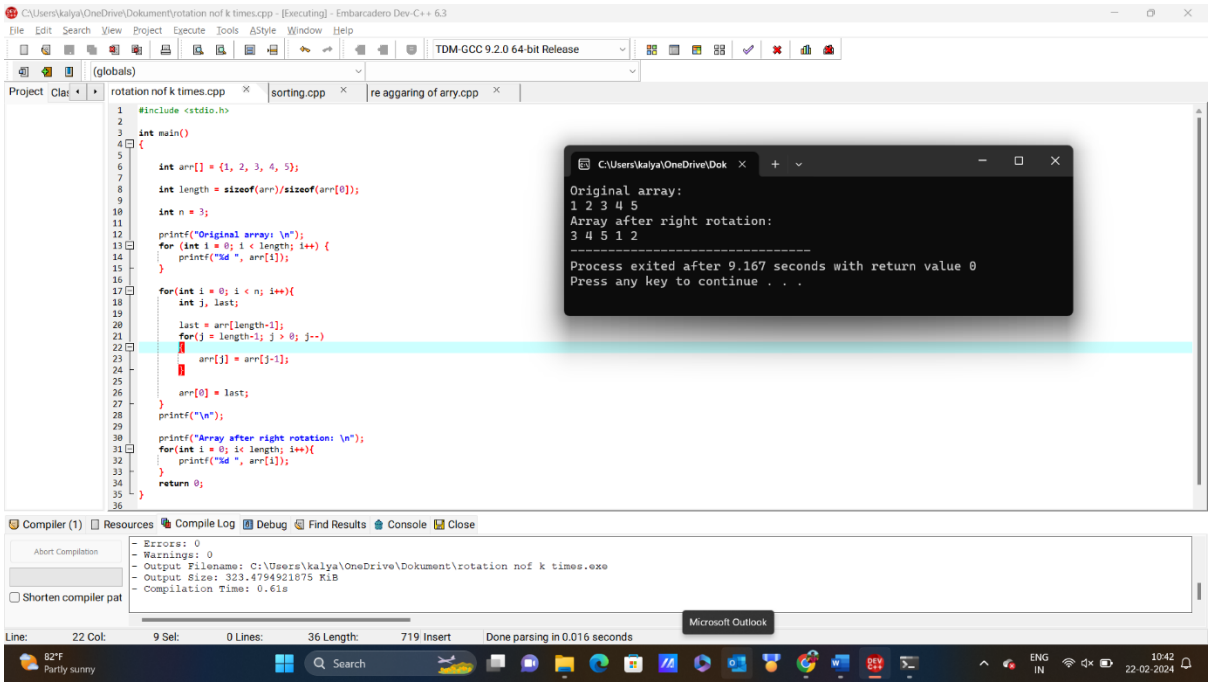
C programming

Day -2

Rearranging of array by odd elements first then even elements



2. rotation of array in k times



3.largest subarray in 0s and 1s

Programiz C Online Compiler

C Certification

main.c

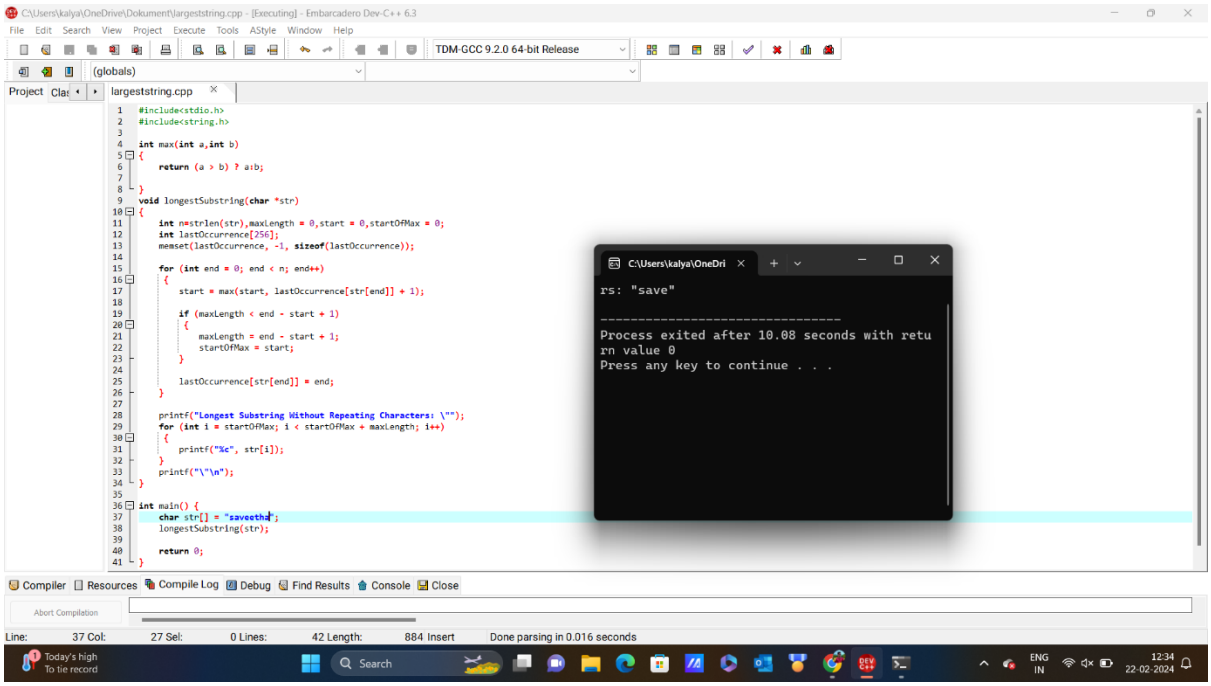
Save Run

```c
#include <stdio.h>
#include <stdlib.h>
int findMaxLength(int* nums, int numsSize) {
    int* prefixSum = (int*)malloc((2 * numsSize + 1) * sizeof(int));
    int maxLength = 0;
    for (int i = 0; i < 2 * numsSize + 1; i++) {
        prefixSum[i] = -2;
    }
    int sum = 0;
    int index;
    for (int i = 0; i < numsSize; i++) {
        sum += (nums[i] == 0) ? -1 : 1;
        if (sum == 0) {
            maxLength = i + 1;
        } else {
            index = sum + numsSize;
            if (prefixSum[index] == -2) {
                prefixSum[index] = i;
            } else {
                maxLength = (i - prefixSum[index] > maxLength) ? i -
                    prefixSum[index] : maxLength;
            }
        }
    }
    free(prefixSum);
    return maxLength;
```

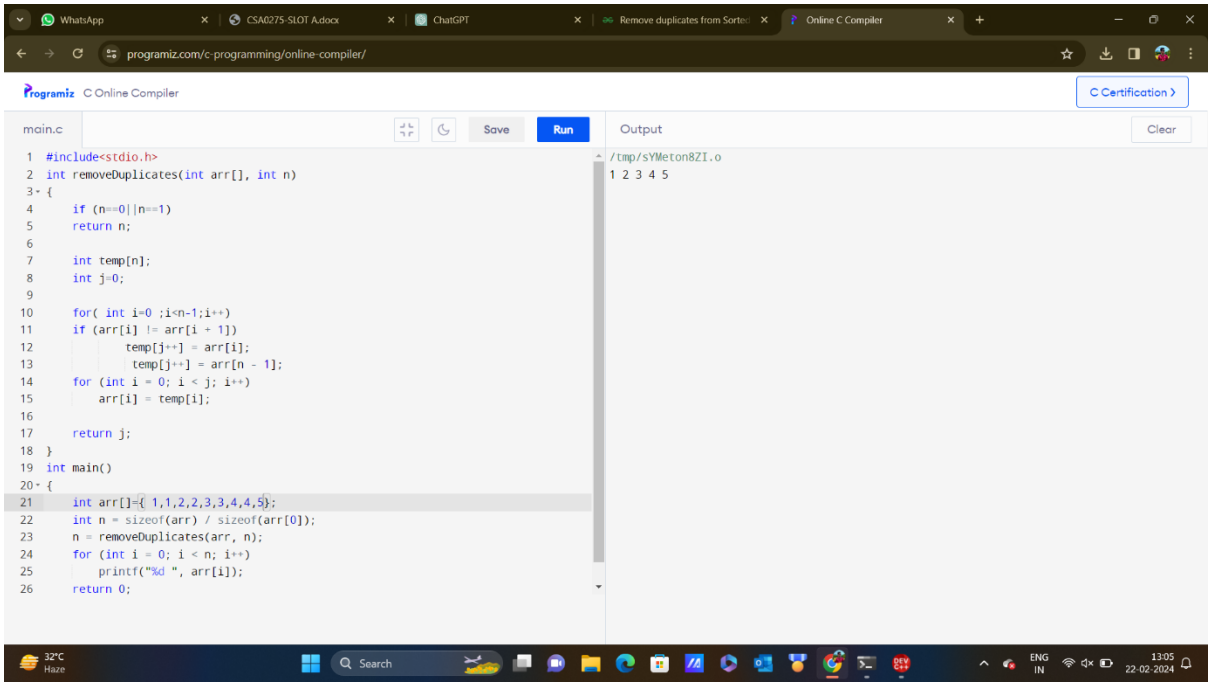
Output Clear

```
/tmp/CuWz9Av5iz.o
The length of the longest subarray with equal number of 0s and 1s is: 8
```

4.deletion of duplicate



5.non repeaterd elements in an array



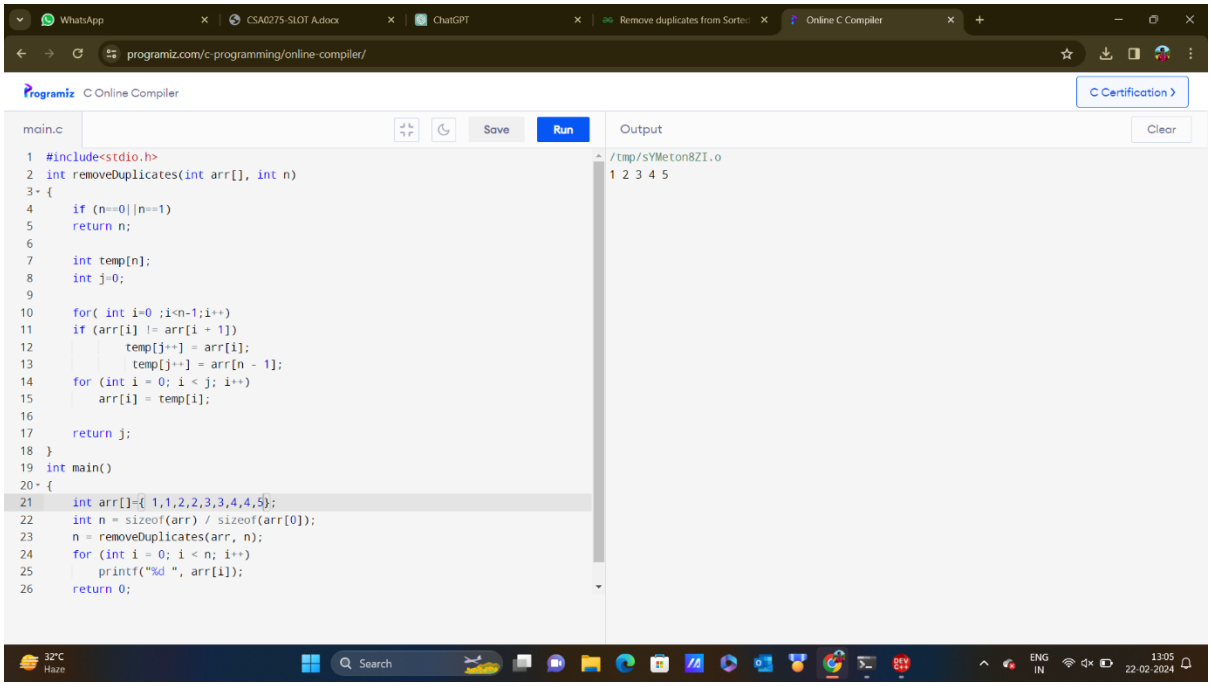

```c
#include<stdio.h>
int removeDuplicates(int arr[], int n)
{
    if (n==0||n==1)
    return n;

    int temp[n];
    int j=0;

    for( int i=0 ;i<n-1;i++)
    if (arr[i] != arr[i + 1])
            temp[j++] = arr[i];
             temp[j++] = arr[n - 1];
    for (int i = 0; i < j; i++)
        arr[i] = temp[i];

    return j;
}
int main()
{
    int arr[]={ 1,1,2,2,3,3,4,4,5};
    int n = sizeof(arr) / sizeof(arr[0]);
    n = removeDuplicates(arr, n);
    for (int i = 0; i < n; i++)
        printf("%d ", arr[i]);
    return 0;
```

6.

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        arr[i] = temp[i];

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    int n = sizeof(arr) / sizeof(arr[0]);
    n = removeDuplicates(arr, n);
    for (int i = 0; i < n; i++)
        printf("%d ", arr[i]);
    return 0;
```

7.median of given array.