120CS0196

PROGRAMMING LABORATORY-8

CS1000

Assignment-8

Group-'P7' Section:'E'

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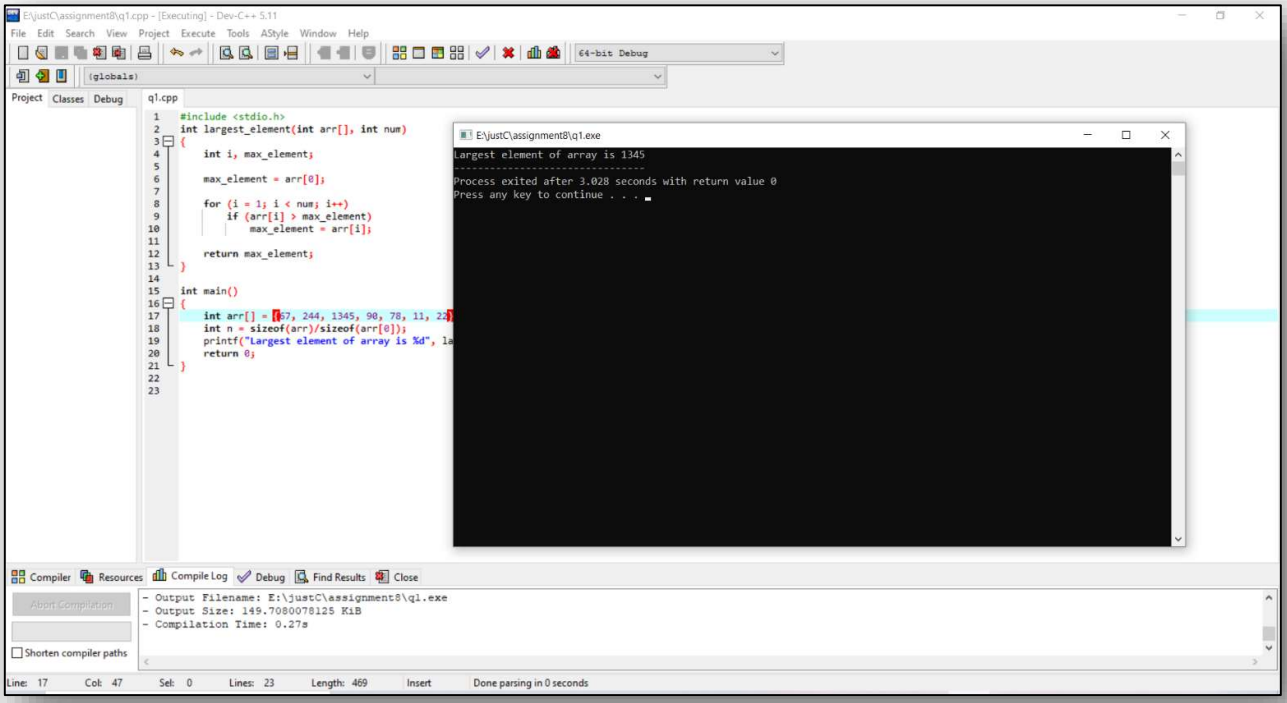
Codes are uploaded on my GitHub account :
https://github.com/prachi237/justC

Assignment-8

1) Write a C program to get the largest element of an array using the function.

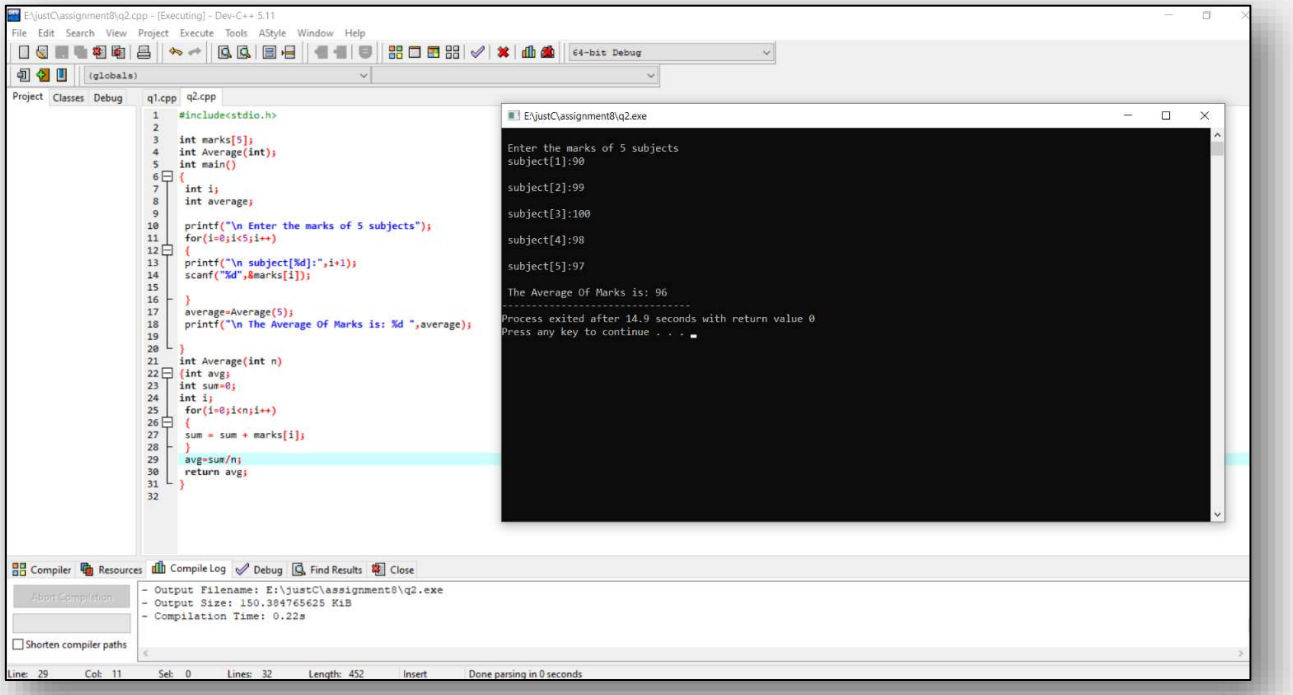
```
#include<stdio.h>
int largest_element(int arr[], int num)
{
    int i, max_element;

    max_element = arr[0];

    for (i = 1; i < num; i++)
        if (arr[i] > max_element)
            max_element = arr[i];

    return max_element;
}

int main()
{
    int arr[] = {67, 244, 1345, 90, 78, 11, 22};
    int n = sizeof(arr)/sizeof(arr[0]);
    printf("Largest element of array is %d", largest_element(arr, n));
  return 0;
}
```



2) Write a C program to find average marks of a student in 5 subjects using the function.

```
#include<stdio.h>
int marks[5];
int Average(int);
int main()
{
 int i;
 int average;

 printf("\n Enter the marks of 5 subjects");
 for(i=0;i<5;i++)
 {
 printf("\n subject[%d]:",i+1);
 scanf("%d",&marks[i]);
  }
 average=Average(5);
```

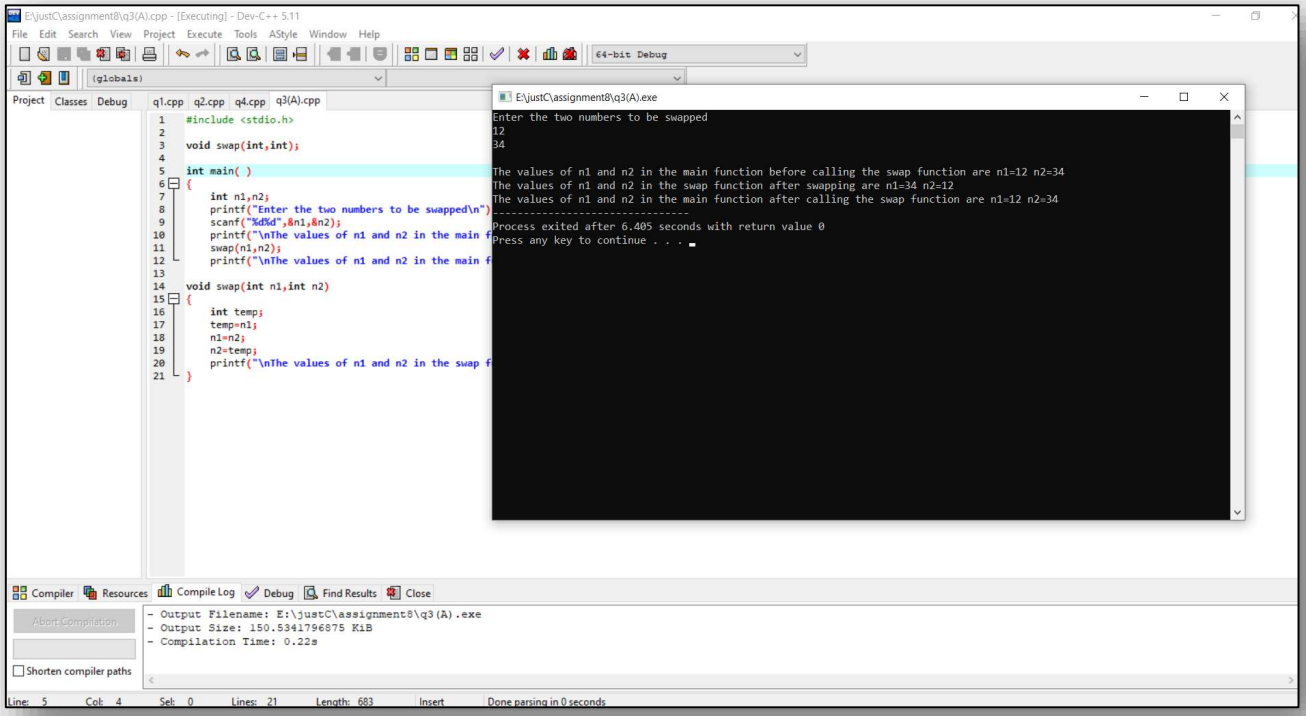
```
 printf("\n The Average Of Marks is: %d ",average);


}
int Average(int n)
{int avg;
int sum=0;
int i;
 for(i=0;i<n;i++)
 {
 sum = sum + marks[i];
 }
 avg=sum/n;
 return avg;
}
```



3) Write a C program to swap to numbers using the function(both ways i.e. call by value and call by reference).

USING CALL BY VALUE

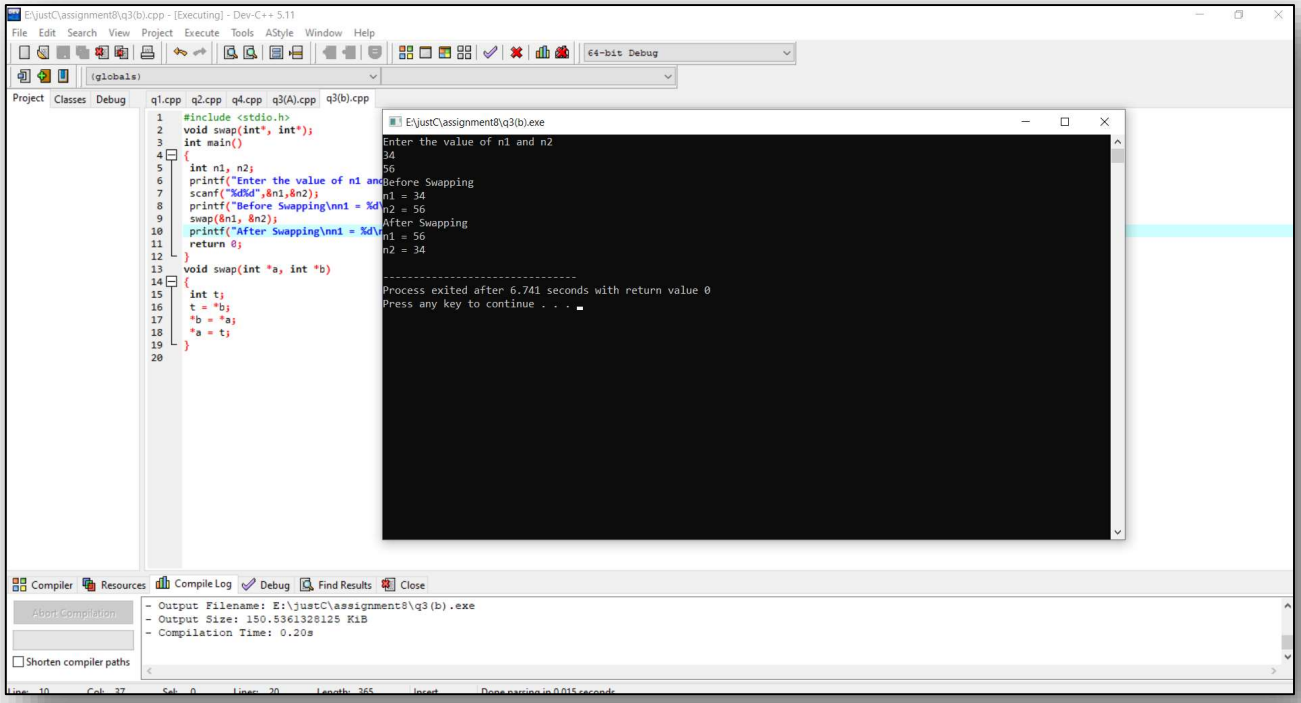
```
#include <stdio.h>
void swap(int,int);
 int main( )
{
    int n1,n2;
    printf("Enter the two numbers to be swapped\n");
    scanf("%d%d",&n1,&n2);
    printf("\nThe values of n1 and n2 in the main function before calling the swap function are n1=%d n2=%d",n1,n2);
    swap(n1,n2);
    printf("\nThe values of n1 and n2 in the main function after calling the swap function are n1=%d n2=%d",n1,n2);}

void swap(int n1,int n2)
{
    int temp;
    temp=n1;
    n1=n2;
    n2=temp;
    printf("\nThe values of n1 and n2 in the swap function after swapping are n1=%d n2=%d",n1,n2);
}
```



USING CALL BY REFERENCE

```
#include <stdio.h>
void swap(int*, int*);
int main()
{
 int n1, n2;
 printf("Enter the value of n1 and n2\n");
 scanf("%d%d",&n1,&n2);
 printf("Before Swapping\nn1 = %d\nn2 = %d\n", n1, n2);
 swap(&n1, &n2);
 printf("After Swapping\nn1 = %d\nn2 = %d\n", n1, n2);
 return 0;
}
void swap(int *a, int *b)
{
 int t;
```

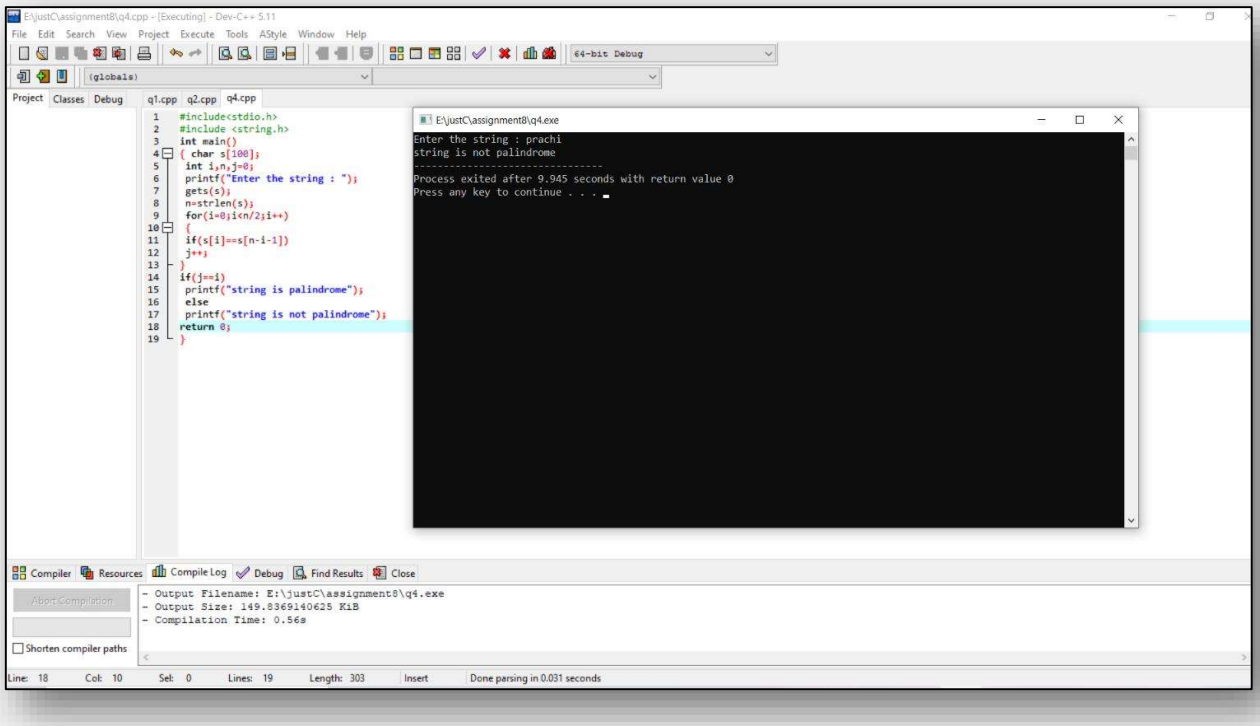
```
 t = *b;
 *b = *a;
 *a = t;
}
```



4) Write a c program to find whether a string is palindrome or not

```
#include<stdio.h>
#include <string.h>
int main()
{ char s[100];
 int i,n,j=0;
 printf("Enter the string : ");
 gets(s);
```

```
 n=strlen(s);
 for(i=0;i<n/2;i++)
 {
 if(s[i]==s[n-i-1])
 j++;
}
if(j==i)
 printf("string is palindrome");
 else
 printf("string is not palindrome");
return 0;
}
```



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Submitted by: Prachi Nandi 120CS0196

THANK YOU