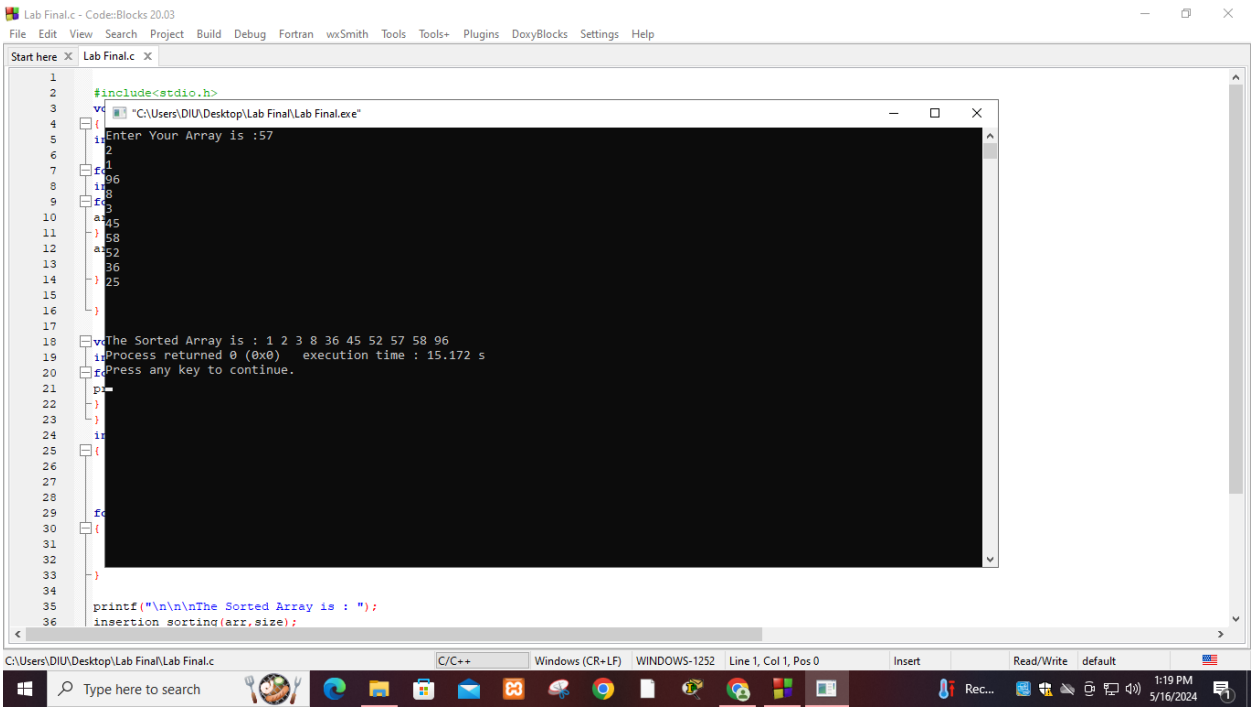
Problem 1

```
#include<stdio.h>
void insertion_sorting(int arr[], int size)
{
int i,j;

for(i=1; i<size; i++){
int temp=arr[i];
for(j=i-1; j>=0 && arr[j]>temp; j--){
arr[j+1]=arr[j];
}
arr[j+1]=temp;

}

}

void print_array(int arr[], int size){
int i;
for(i=0; i<size; i++){
printf("%d ",arr[i]);
}
}
int main()
{
   int arr[10];
```

```
    int i,size=10;
    printf("Enter Your Array is :");
for(i=0; i<10; i++)
{

    scanf("%d ",&arr[i]);
}

printf("\n\n\nThe Sorted Array is : ");
insertion_sorting(arr,size);
print_array(arr,size);

return 0;
}
```


Lab Final.c - Code::Blocks 20.03
File Edit View Search Project Build Debug Fortran wxSmith Tools Tools+ Plugins DoxyBlocks Settings Help
Start here
Lab Final.c
#include<stdio.h>
"C:\Users\DIU\Desktop\Lab Final\Lab Final.exe"
Enter Your Array is :57
2
1
96
8
3
45
58
52
36
25
The Sorted Array is : 1 2 3 8 36 45 52 57 58 96
Process returned 0 (0x0)   execution time : 15.172 s
Press any key to continue.
printf("\n\n\nThe Sorted Array is : ");
insertion_sorting(arr,size);
C:\Users\DIU\Desktop\Lab Final\Lab Final.c
C/C++
Windows (CR+LF)
WINDOWS-1252
Line 1, Col 1, Pos 0
Insert
Read/Write
default
Type here to search
Rec...
1:19 PM
5/16/2024

Problem 2

```
#include<stdio.h>
void print_array(int arr[],int size)
{
   int i;
   printf("\n\nYour Array is : ");
   for(i=0; i<size; i++)
   {

      printf("%d ",arr[i]);
   }
}

void delet_index(int* arr, int size, int position)
{
   int i;

   for(i=position; i<=size; i++)
   {

      arr[i]=arr[i+1];
   }
}
int main()
{
```

```
    printf("Enter Your Roll : ");
    int i,position;
    int arr[10];
    int size = sizeof(arr)/sizeof(arr[0]);
    for(i=0; i<size; i++)
    {
       scanf("%d",&arr[i]);
    }
    print_array(arr,size);
    printf("\nWhich index element you want to remove : ");
    scanf("%d",&position);
    delet_index(arr,size,position);
    size--;
    print_array(arr,size);
return 0;
}
```