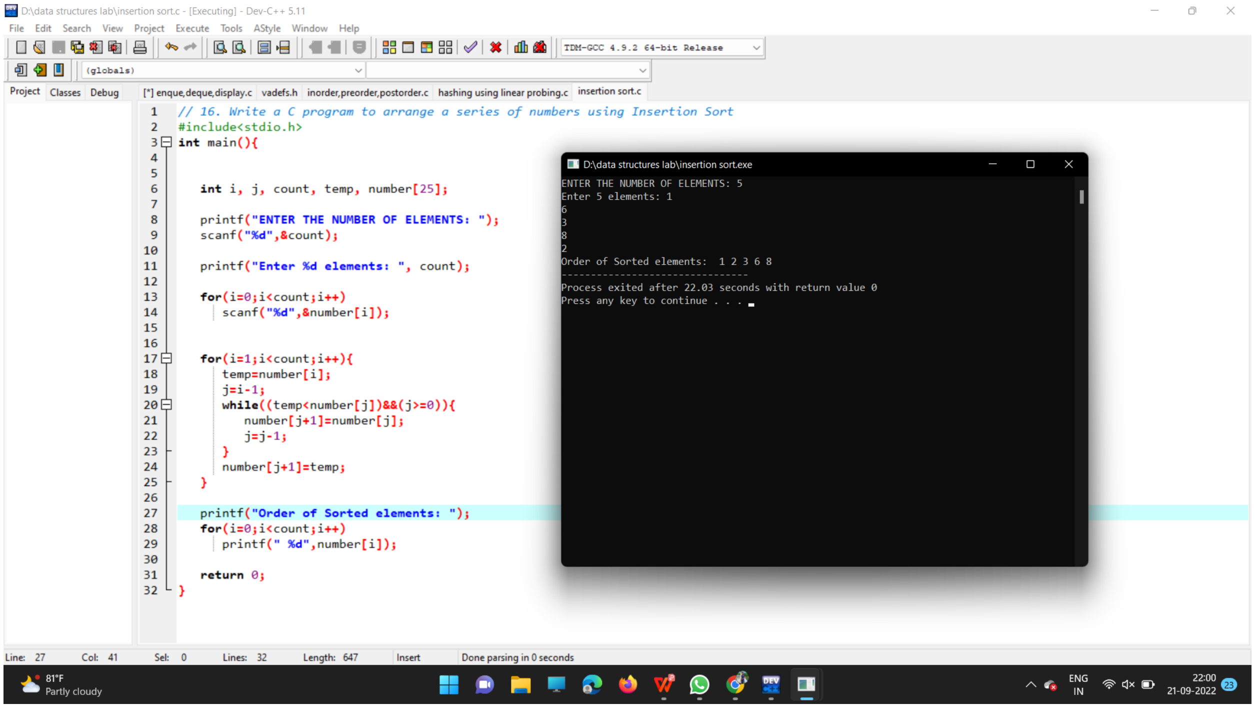
```c
// 16. Write a C program to arrange a series of numbers using Insertion Sort
#include<stdio.h>
int main(){
  int i, j, count, temp, number[25];
  printf("ENTER THE NUMBER OF ELEMENTS: ");
  scanf("%d",&count);
  printf("Enter %d elements: ", count);
  for(i=0;i<count;i++)
    scanf("%d",&number[i]);
  for(i=1;i<count;i++){
    temp=number[i];
    j=i-1;
    while((temp<number[j])&&(j>=0)){
      number[j+1]=number[j];
      j=j-1;
    }
    number[j+1]=temp;
  }

  printf("Order of Sorted elements: ");
  for(i=0;i<count;i++)
    printf(" %d",number[i]);

  return 0;
}
```


D:\data structures lab\insertion sort.c - [Executing] - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
TDM-GCC 4.9.2 64-bit Release
(globals)
Project Classes Debug
[*] enque,deque,display.c vadefs.h inorder,preorder,postorder.c hashing using linear probing.c insertion sort.c
Line: 27 Col: 41 Sel: 0 Lines: 32 Length: 647 Insert Done parsing in 0 seconds
81°F Partly cloudy
ENG IN
22:00 21-09-2022

```c
// 16. Write a C program to arrange a series of numbers using Insertion Sort
#include<stdio.h>
int main(){


	int i, j, count, temp, number[25];

	printf("ENTER THE NUMBER OF ELEMENTS: ");
	scanf("%d",&count);

	printf("Enter %d elements: ", count);

	for(i=0;i<count;i++)
		scanf("%d",&number[i]);


	for(i=1;i<count;i++){
		temp=number[i];
		j=i-1;
		while((temp<number[j])&&(j>=0)){
			number[j+1]=number[j];
			j=j-1;
		}
		number[j+1]=temp;
	}

	printf("Order of Sorted elements: ");
	for(i=0;i<count;i++)
		printf(" %d",number[i]);

	return 0;
}
```

D:\data structures lab\insertion sort.exe

```
ENTER THE NUMBER OF ELEMENTS: 5
Enter 5 elements: 1
6
3
8
2
Order of Sorted elements:  1 2 3 6 8
--------------------------------
Process exited after 22.03 seconds with return value 0
Press any key to continue . . .
```