**List.h**

#pragma once

#include<iostream>

using namespace std;

class List

{

int\*arr;

int size;

public:

List();

List(int\*arrP, int s);

~List();

void push(int data);

int pop();

bool isFull();

bool isEmpty();

int num\_Of\_Elemets();

void display();

};

**List.cpp**

#include "List.h"

int top;

List::List()

{

arr = nullptr;

size = 0;

top = -1;

}

List::List(int\*arrP, int s)

{

arr = arrP;

size = s;

top = -1;

}

List::~List(){}

void List::push(int data)

{

if (isFull() == true)

{

cout << "Overflow" << endl;

}

top++;

arr[top] = data;

}

void List::display()

{

for (int i = 0; i <= top; i++)

{

cout << arr[i] << " ";

}

}

int List::pop()

{

if (isEmpty() == true)

{

cout << "Underflow" << endl;

return 0;

}

int val = arr[top];

top--;

return val;

}

bool List::isEmpty()

{

if (top == -1)

{

return true;

}

else

{

return false;

}

}

bool List::isFull()

{

if (top == size - 1)

{

return true;

}

else

{

return false;

}

}

int List::num\_Of\_Elemets()

{

int num = top + 1;

return num;

}

**source.cpp**

#include"List.h"

int main()

{

int arr[5];

List obj(arr, 5);

obj.push(12);

obj.push(90);

obj.push(78);

obj.push(43);

obj.push(30);

obj.pop();

obj.pop();

cout << "Number of Elemets in stack are : " << obj.num\_Of\_Elemets() << endl;

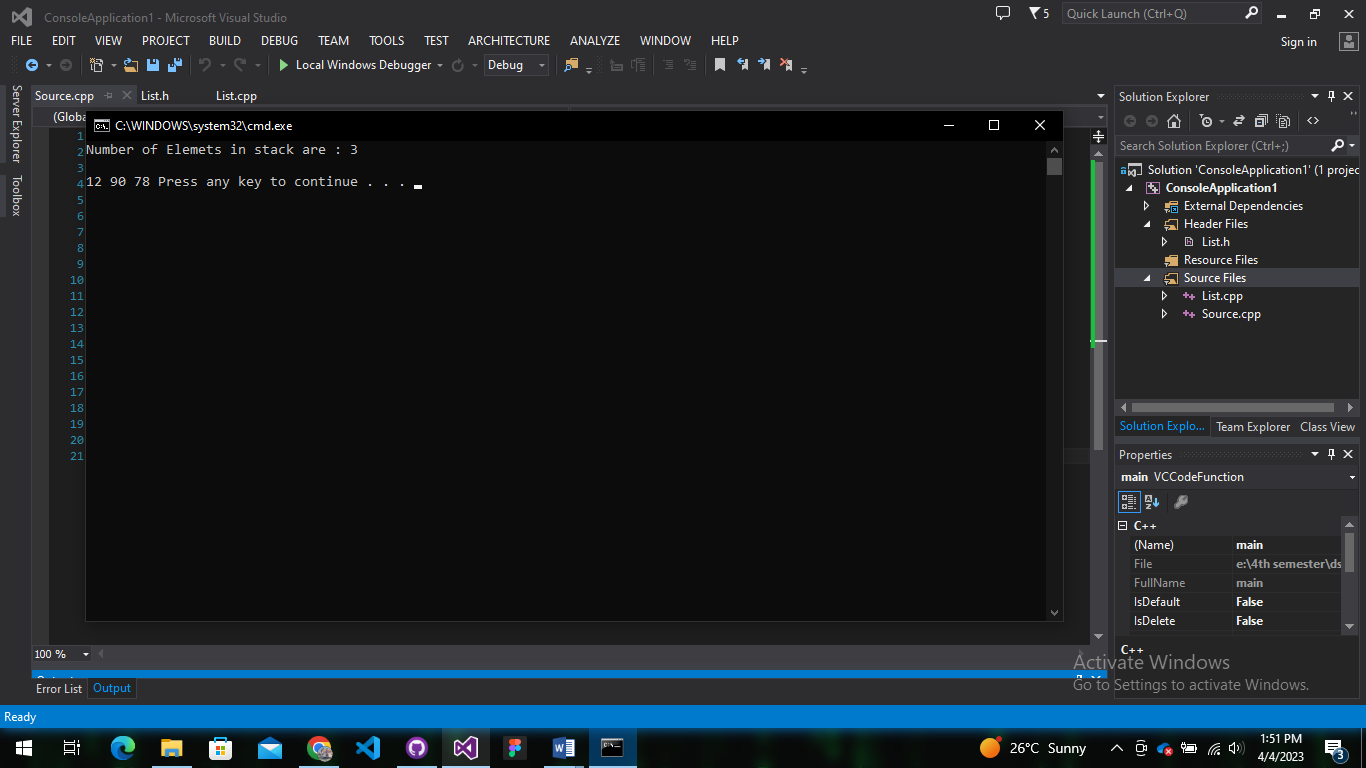
cout << endl;

obj.display();

return 0;

}

**Output Console:**

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