Project 3

Write a program that accept 20 numbers from the user (numbers can range from -100 to 100) and outputs the sorted numbers in ascending order.

You will need to submit your .cpp file as well as the screen shot of your output.

Following rubrics will be used to grade your program:

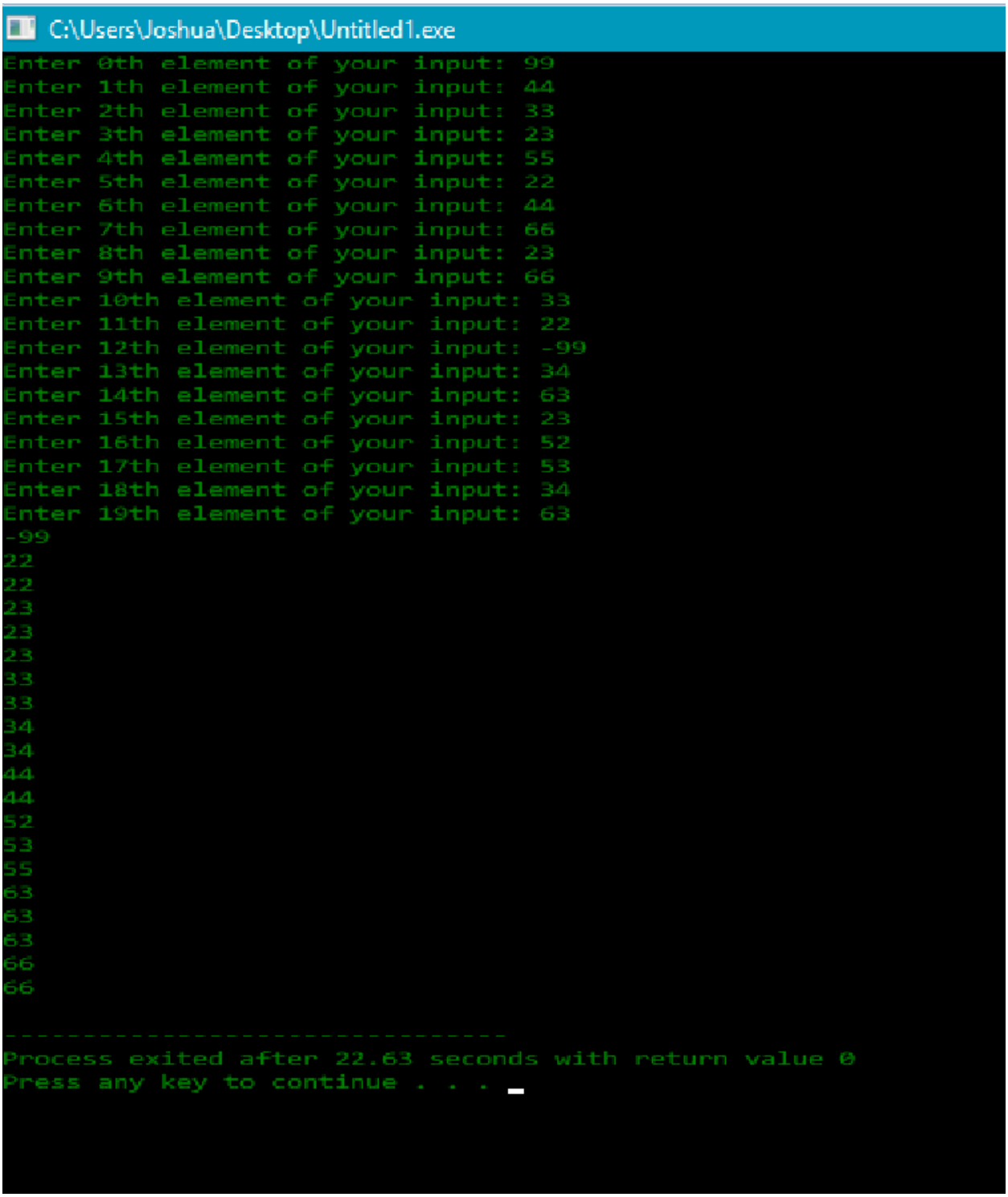
Criteria	Grade percentage assigned to each criteria	Excellent (100% of assigned grade)	Adequate (80% of assigned grade)	Poor (50% of assigned grade)	Not Met (0% of assigned grade)
Program Specifications / Correctness	50%*	No errors, program always compiles and executes with no bugs and meets the specification(s).	Program compiles but does not meet ALL the specification(s).	There are errors and program is not compiling and does not meet the specification(s)	Did not turn in
Readability	20%	Code is clean, understandable, and well-organized.	Minor issues with consistent indentation, use of whitespace, variable naming, or general organization.	Program is poorly designed and does not flow well	N/A
Documentation	20%	No errors, code is well-commented.	Missing comments	Poorly commented	N/A
Code Efficiency	5%	Utilizes the best efficient approach in every case.	*There are some efficient approaches*	Not very efficient	N/A
Assignment Specifications	5%	Submitted the .cpp file as well as a screen shot of the output	*Submits the .cpp file and the screen shot of the compiled file*	Submits the .cpp file but not the Screen shot	N/A

Source Code:

```
#include <iostream>

using namespace std;


int main()
{
	system("color 02");//System Console's color and font

	int arrays[20];//Assigning the array number
	int x, y, tem, b;//Assigning integers

	for (x = 0; x < 20; x++)
	{
```

```
                    cout << "Enter " << x << "th element of your input: ";
                    cin >> b;
                    if ((b >= -100) && (b <= 100))
                    {
                            arrays[x] = b;
                    }

                    else
                    {
                            cout << "Please enter from -100 to 100 range of
values.";//Else the return statement is from the value
                            return 0;
                    }

    }

      for (x = 0; x<20; x++)
      {
                    for (y = 0; y<20 - x; y++)
                    {
                            if (arrays[y]>arrays[y + 1])//Ascending the order of elements
together
                            {
                                    tem = arrays[y];
                                    arrays[y] = arrays[y + 1];
                                    arrays[y + 1] = tem;
                            }
                    }
      }

      for (x = 0; x<20; x++)
      {
            cout << arrays[x] << endl;
      }
```

Output:


C:\Users\Joshua\Desktop\Untitled1.exe
Enter 0th element of your input: 99
Enter 1th element of your input: 44
Enter 2th element of your input: 33
Enter 3th element of your input: 23
Enter 4th element of your input: 55
Enter 5th element of your input: 22
Enter 6th element of your input: 44
Enter 7th element of your input: 66
Enter 8th element of your input: 23
Enter 9th element of your input: 66
Enter 10th element of your input: 33
Enter 11th element of your input: 22
Enter 12th element of your input: -99
Enter 13th element of your input: 34
Enter 14th element of your input: 63
Enter 15th element of your input: 23
Enter 16th element of your input: 52
Enter 17th element of your input: 53
Enter 18th element of your input: 34
Enter 19th element of your input: 63
-99
22
22
23
23
23
33
33
34
34
44
44
52
53
55
63
63
63
66
66

Process exited after 22.63 seconds with return value 0
Press any key to continue . . .