2021 Winter CIS200 – Programming Assignment 2

List, Operator and Friend

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# **Question 1 Unsorted List (30 points)**

## Source code (USED C++ COMPILER on Microsoft Windows 10)

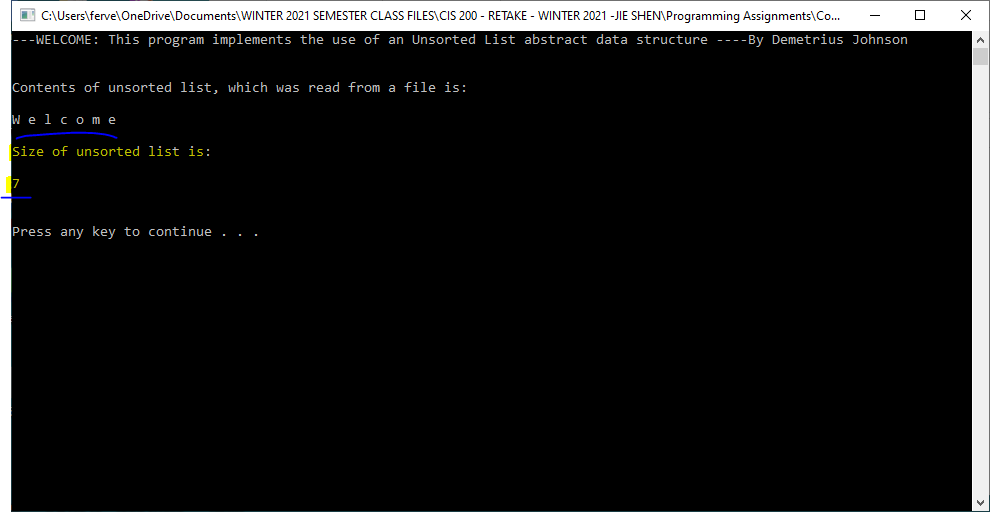
See CPP and H uploads I made in canvas with this document along with the executables.

## Test data and expected results

Test Table:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Test # | Valid / Invalid Data | Description of test | Input Value | Expected Output | Actual Output | Test Pass / Fail |
| 1 | valid | Output the results from the char.dat file and the number of elements | Char.dat | See screenshot | See screenshot | pass |

### TEST 1:



# **Question 2 Operator (30 points)**

## Source code (USED C++ COMPILER on Microsoft Windows 10)

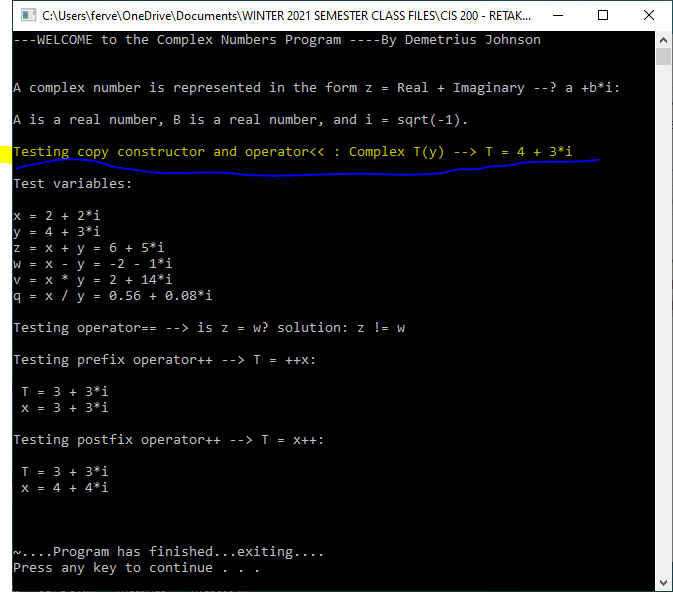
See CPP and H uploads I made in canvas with this document along with the executables

## Test data and expected results

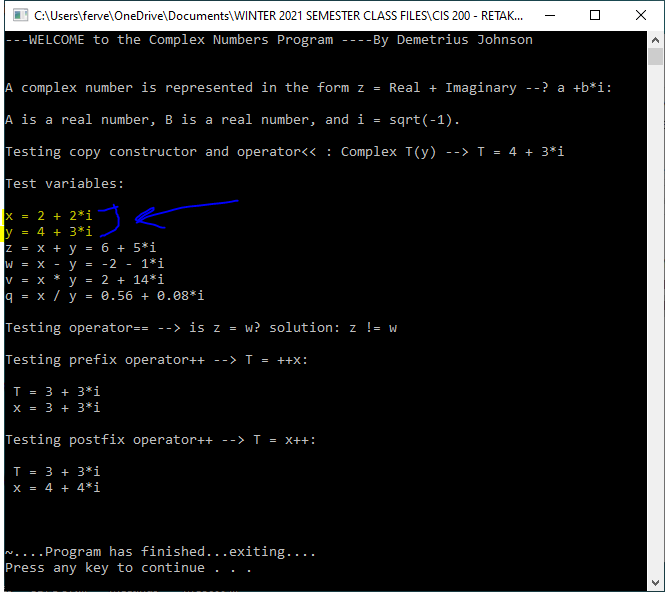
Test Table:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Test # | Valid / Invalid Data | Description of test | Input Value | Expected Output | Actual Output | Test Pass / Fail |
| 1 | valid | Test the copy constructer of Complex class | T(y) | See screenshot | See screenshot | pass |
| 2 | valid | Test x and y using assignment operator | Assigning x and y | See screenshot | See screenshot | pass |
| 3 | valid | Test addition and subtraction operator of Complex class | Assigning z and w | See screenshot | See screenshot | pass |
| 4 | valid | Test multiplication and division of Complex class | Assigning v and q | See screenshot | See screenshot | pass |
| 5 | valid | Test == comparison operator of Complex class | Comparing w to z | See screenshot | See screenshot | pass |
| 6 | valid | Test prefix and postfix operator++ | Assigning T to x | See screenshot | See screenshot | pass |

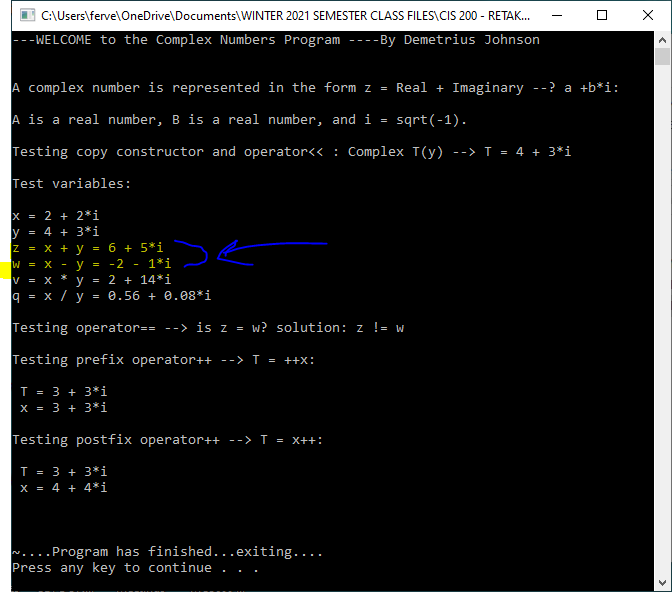
### TEST 1:



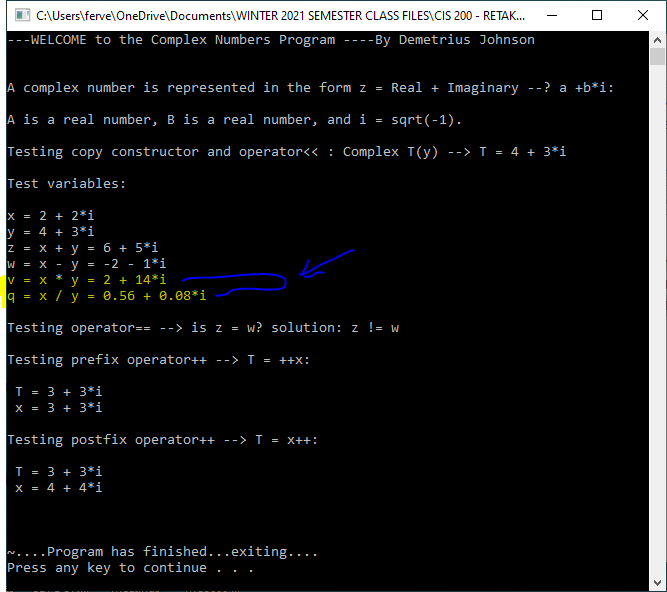
### TEST 2:



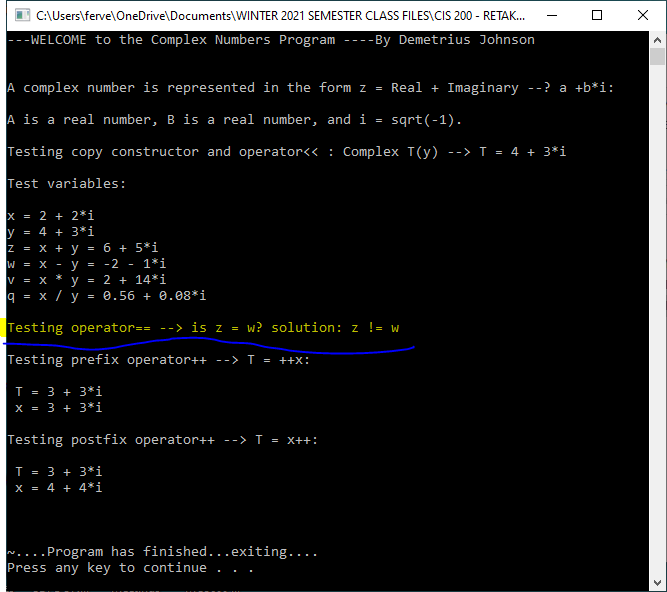
### TEST 3:



### TEST 4:



### TEST 5:



### TEST 6:

