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COMP-SCI 303

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My Assignment 1 Notes

My Coding Assumptions

- The file type I am working with will always consist of 100 integers imported from a text (txt) file. I included in the repository the text file I used to test my code.
- For the function that adds an integer at the end of an array, rather than create a whole new copy of an array with the addition of the new integer, I initialized the array to have a constant value of 200 integers. This was to avoid creating a slower running program for each addition.

How to Run my Program

1. Program asks for a text file - it identifies a valid file if it has **“.txt”**
2. Choose an option from the displayed menu - must type the integer to select option
3. After choosing a valid option, the program runs code for given option
4. After finishing chosen option, displayed menu reappears
5. Continues this process until user quits (selects option 5 - quit)

Screenshots

```
Microsoft Visual Studio Debu...
Enter a text file: test.csv
Must be a text (.txt) file.
Enter a text file: 1
Must be a text (.txt) file.
Enter a text file: hi
Must be a text (.txt) file.
Enter a text file: test.txt
Could not open test2.txt
Please try again.

Enter a text file: test.txt
File opened successfully!

Text File Number Reader
-----
1. Check a Number
2. Modify a Number
3. Add a Number
4. Delete a Number
5. Quit

Enter a number option: hi
Please enter a valid number option.
Enter a number option: 1
Enter a number to check: hi
Number does not exist.

1 2 3 4 5 6 7 8 9 10
11 12 13 14 15 16 17 18 19 20
21 22 23 24 25 26 27 28 29 30
31 32 33 34 35 36 37 38 39 40
41 42 43 44 45 46 47 48 49 50
51 52 53 54 55 56 57 58 59 60
61 62 63 64 65 66 67 68 69 70
71 72 73 74 75 76 77 78 79 80
81 82 83 84 85 86 87 88 89 90
91 92 93 94 95 96 97 98 99 100

Text File Number Reader
-----
1. Check a Number
2. Modify a Number
3. Add a Number
4. Delete a Number
5. Quit

Enter a number option: Please enter a valid number option.
Enter a number option: 1
Enter a number to check: 4
The integer 4 exists at index 3

1 2 3 4 5 6 7 8 9 10
11 12 13 14 15 16 17 18 19 20
21 22 23 24 25 26 27 28 29 30
31 32 33 34 35 36 37 38 39 40
41 42 43 44 45 46 47 48 49 50
51 52 53 54 55 56 57 58 59 60
61 62 63 64 65 66 67 68 69 70
71 72 73 74 75 76 77 78 79 80
81 82 83 84 85 86 87 88 89 90
91 92 93 94 95 96 97 98 99 100

Text File Number Reader
-----
1. Check a Number
2. Modify a Number
3. Add a Number
4. Delete a Number
5. Quit
```

```
Microsoft Visual Studio Debu...
Text File Number Reader
-----
1. Check a Number
2. Modify a Number
3. Add a Number
4. Delete a Number
5. Quit

Enter a number option: 2
Enter an index of an integer to modify: 94
Enter a new integer for the index: 999
The new integer at index 94 is 999
The old integer at index 94 was 55

1 2 3 4 5 6 7 8 9 10
11 12 13 14 15 16 17 18 19 20
21 22 23 24 25 26 27 28 29 30
31 32 33 34 35 36 37 38 39 40
41 42 43 44 45 46 47 48 49 50
51 52 53 54 999 56 57 58 59 60
61 62 63 64 65 66 67 68 69 70
71 72 73 74 75 76 77 78 79 80
81 82 83 84 85 86 87 88 89 90
91 92 93 94 95 96 97 98 99 100

Text File Number Reader
-----
1. Check a Number
2. Modify a Number
3. Add a Number
4. Delete a Number
5. Quit

Enter a number option: 3
Enter a new integer to append: hi
Input must be a number. Try again

Enter a new integer to append: 654

1 2 3 4 5 6 7 8 9 10
11 12 13 14 15 16 17 18 19 20
21 22 23 24 25 26 27 28 29 30
31 32 33 34 35 36 37 38 39 40
41 42 43 44 45 46 47 48 49 50
51 52 53 54 999 56 57 58 59 60
61 62 63 64 65 66 67 68 69 70
71 72 73 74 75 76 77 78 79 80
81 82 83 84 85 86 87 88 89 90
91 92 93 94 95 96 97 98 99 100
654

Text File Number Reader
-----
1. Check a Number
2. Modify a Number
3. Add a Number
4. Delete a Number
5. Quit

Enter a number option: 3
Enter a new integer to append: 9999

1 2 3 4 5 6 7 8 9 10
11 12 13 14 15 16 17 18 19 20
21 22 23 24 25 26 27 28 29 30
31 32 33 34 35 36 37 38 39 40
41 42 43 44 45 46 47 48 49 50
51 52 53 54 999 56 57 58 59 60
61 62 63 64 65 66 67 68 69 70
71 72 73 74 75 76 77 78 79 80
81 82 83 84 85 86 87 88 89 90
91 92 93 94 95 96 97 98 99 100
9999
```

```
Microsoft Visual Studio Debu x + -
Enter a text file: test.csv
Must be a text (.txt) file.
Enter a text file: i
Must be a text (.txt) file.
Enter a text file: hi
Must be a text (.txt) file.
Enter a text file: test.txt
Could not open test2.txt
Please try again.

Enter a text file: test.txt
File opened successfully!

Text File Number Reader
-----
1. Check a Number
2. Modify a Number
3. Add a Number
4. Delete a Number
5. Quit

Enter a number option: hi
Please enter a valid number option.
Enter a number option: 1
Enter a number to check: hi
Number does not exist.

1 2 3 4 5 6 7 8 9 10
11 12 13 14 15 16 17 18 19 20
21 22 23 24 25 26 27 28 29 30
31 32 33 34 35 36 37 38 39 40
41 42 43 44 45 46 47 48 49 50
51 52 53 54 55 56 57 58 59 60
61 62 63 64 65 66 67 68 69 70
71 72 73 74 75 76 77 78 79 80
81 82 83 84 85 86 87 88 89 90
91 92 93 94 95 96 97 98 99 100

Text File Number Reader
-----
1. Check a Number
2. Modify a Number
3. Add a Number
4. Delete a Number
5. Quit

Enter a number option: Please enter a valid number option.
Enter a number option: 4
Enter a number to check: 4
The integer 4 exists at index 3

1 2 3 4 5 6 7 8 9 10
11 12 13 14 15 16 17 18 19 20
21 22 23 24 25 26 27 28 29 30
31 32 33 34 35 36 37 38 39 40
41 42 43 44 45 46 47 48 49 50
51 52 53 54 55 56 57 58 59 60
61 62 63 64 65 66 67 68 69 70
71 72 73 74 75 76 77 78 79 80
81 82 83 84 85 86 87 88 89 90
91 92 93 94 95 96 97 98 99 100

Text File Number Reader
-----
1. Check a Number
2. Modify a Number
3. Add a Number
4. Delete a Number
5. Quit
```

```
Microsoft Visual Studio Debu x + -
91 92 93 94 95 96 97 98 99 100
65u 9000

Text File Number Reader
-----
1. Check a Number
2. Modify a Number
3. Add a Number
4. Delete a Number
5. Quit

Enter a number option: 4
Enter an index of an integer to delete it: 5

1 2 3 4 5 7 8 9 10 11
12 13 14 15 16 17 18 19 20 21
22 23 24 25 26 27 28 29 30 31
32 33 34 35 36 37 38 39 40 41
42 43 44 45 46 47 48 49 50 51
52 53 54 999 56 57 58 59 60 61
62 63 64 65 66 67 68 69 70 71
72 73 74 75 76 77 78 79 80 81
82 83 84 85 86 87 88 89 90 91
92 93 94 95 96 97 98 99 100 65u
9000

Text File Number Reader
-----
1. Check a Number
2. Modify a Number
3. Add a Number
4. Delete a Number
5. Quit

Enter a number option: 4
Enter an index of an integer to delete it: 102
Enter an index with an assigned value.

1 2 3 4 5 7 8 9 10 11
12 13 14 15 16 17 18 19 20 21
22 23 24 25 26 27 28 29 30 31
32 33 34 35 36 37 38 39 40 41
42 43 44 45 46 47 48 49 50 51
52 53 54 999 56 57 58 59 60 61
62 63 64 65 66 67 68 69 70 71
72 73 74 75 76 77 78 79 80 81
82 83 84 85 86 87 88 89 90 91
92 93 94 95 96 97 98 99 100 65u
9000

Text File Number Reader
-----
1. Check a Number
2. Modify a Number
3. Add a Number
4. Delete a Number
5. Quit

Enter a number option: 4
Enter an index of an integer to delete it: 101

1 2 3 4 5 7 8 9 10 11
12 13 14 15 16 17 18 19 20 21
22 23 24 25 26 27 28 29 30 31
32 33 34 35 36 37 38 39 40 41
42 43 44 45 46 47 48 49 50 51
52 53 54 999 56 57 58 59 60 61
62 63 64 65 66 67 68 69 70 71
72 73 74 75 76 77 78 79 80 81
82 43 84 85 86 87 88 89 90 91
92 93 94 95 96 97 98 99 100 65u
```

```
Microsoft Visual Studio Debu x + -
Enter a text file: test.csv
Must be a text (.txt) file.
Enter a text file: 1
Must be a text (.txt) file.
Enter a text file: hi
Must be a text (.txt) file.
Enter a text file: test.txt
Could not open test2.txt
Please try again.

Enter a text file: test.txt
File opened successfully!

Text File Number Reader
-----
1. Check a Number
2. Modify a Number
3. Add a Number
4. Delete a Number
5. Quit

Enter a number option: hi
Please enter a valid number option.
Enter a number option: 1
Enter a number to check: hi
Number does not exist.

1 2 3 4 5 6 7 8 9 10
11 12 13 14 15 16 17 18 19 20
21 22 23 24 25 26 27 28 29 30
31 32 33 34 35 36 37 38 39 40
41 42 43 44 45 46 47 48 49 50
51 52 53 54 55 56 57 58 59 60
61 62 63 64 65 66 67 68 69 70
71 72 73 74 75 76 77 78 79 80
81 82 83 84 85 86 87 88 89 90
91 92 93 94 95 96 97 98 99 100

Text File Number Reader
-----
1. Check a Number
2. Modify a Number
3. Add a Number
4. Delete a Number
5. Quit

Enter a number option: Please enter a valid number option.
Enter a number option: 4
Enter a number to check: 4
The integer 4 exists at index 3

1 2 3 4 5 6 7 8 9 10
11 12 13 14 15 16 17 18 19 20
21 22 23 24 25 26 27 28 29 30
31 32 33 34 35 36 37 38 39 40
41 42 43 44 45 46 47 48 49 50
51 52 53 54 55 56 57 58 59 60
61 62 63 64 65 66 67 68 69 70
71 72 73 74 75 76 77 78 79 80
81 82 83 84 85 86 87 88 89 90
91 92 93 94 95 96 97 98 99 100

Text File Number Reader
-----
1. Check a Number
2. Modify a Number
3. Add a Number
4. Delete a Number
5. Quit
```

```
Microsoft Visual Studio Debu x + -
22 23 24 25 26 27 28 29 30 31
22 23 24 25 26 27 28 29 30 31
42 43 44 45 46 47 48 49 50 51
52 53 54 55 56 57 58 59 60 61
62 63 64 65 66 67 68 69 70 71
72 73 74 75 76 77 78 79 80 81
82 83 84 85 86 87 88 89 90 91
92 93 94 95 96 97 98 99 100 654
9800

Text File Number Reader
-----
1. Check a Number
2. Modify a Number
3. Add a Number
4. Delete a Number
5. Quit

Enter a number option: 4
Enter an index of an integer to delete it: 102
Enter an index with an assigned value.

1 2 3 4 5 6 7 8 9 10 11
12 13 14 15 16 17 18 19 20 21
22 23 24 25 26 27 28 29 30 31
32 33 34 35 36 37 38 39 40 41
42 43 44 45 46 47 48 49 50 51
52 53 54 55 56 57 58 59 60 61
62 63 64 65 66 67 68 69 70 71
72 73 74 75 76 77 78 79 80 81
82 83 84 85 86 87 88 89 90 91
92 93 94 95 96 97 98 99 100 654
9800

Text File Number Reader
-----
1. Check a Number
2. Modify a Number
3. Add a Number
4. Delete a Number
5. Quit

Enter a number option: 4
Enter an index of an integer to delete it: 101

1 2 3 4 5 6 7 8 9 10 11
12 13 14 15 16 17 18 19 20 21
22 23 24 25 26 27 28 29 30 31
32 33 34 35 36 37 38 39 40 41
42 43 44 45 46 47 48 49 50 51
52 53 54 55 56 57 58 59 60 61
62 63 64 65 66 67 68 69 70 71
72 73 74 75 76 77 78 79 80 81
82 83 84 85 86 87 88 89 90 91
92 93 94 95 96 97 98 99 100 654

Text File Number Reader
-----
1. Check a Number
2. Modify a Number
3. Add a Number
4. Delete a Number
5. Quit

Enter a number option: 5

Thank you for using Text File Number Reader!
Quitting program...

C:\Users\justlanceur\repos\assignment1\Debug\assignment1.exe [process 33688] exited with code 0.
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .
```