Hello,

This program reads input from a txt file.
You can then modify the data using the Menu Options.
You may type 'q' at any time to exit the program

Enter a .txt filename (included file integerList.txt) LargeFile.txt

          Main Menu

Search for a value in the array - type 's'
Delete a value from the array - type 'd'
Overwrite a value in the array - type 'o'
Append a value to the array   - type 'a;
Retrieve a value from the array - type 'r'
Output the array to the screen - type 'p'
Enter a new file to be read   - type 'f'
Write array to a file   - type 'w'
Quit   - type 'q'

What would you like to do?: p

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50   80   28   79    9   71   75   82   34   72
23    1   12   18   86   26   78    2   12   92
 5  100   99   56   61   25   95   56   64   55
27   59   35   87   77   74   45   85   73   16
91   65   31   50   73   31   19   75   65    7
17   56   19   34   46   71   33   13   70   33
97   40   84   14   62   67   16    4   64   56
26    4   33   82   67   83   74   21   83   80
29   50   75   31    9   51   10   63   85   70
96   70   14   86   94   26   36   75   43   14
50   80   28   79    9   71   75   82   34   72
23    1   12   18   86   26   78    2   12   92
 5  100   99   56   61   25   95   56   64   55
27   59   35   87   77   74   45   85   73   16
91   65   31   50   73   31   19   75   65    7
17   56   19   34   46   71   33   13   70   33
97   40   84   14   62   67   16    4   64   56
26    4   33   82   67   83   74   21   83   80
29   50   75   31    9   51   10   63   85   70
96   70   14   86   94   26   36   75   43   14
50   80   28   79    9   71   75   82   34   72
23    1   12   18   86   26 658032    2   12   92
 5  100   99   56   61   25   95   56   64   55
27   59   35   87   77   74   45   85   73   16
91   65   31   50   73   31   19   75   65    7
17   56   19   34   46   71   33   13   70   33
97   40   84   14   62   67   16    4   64   56
26    4   33   82   67   83   74   21   83   80
29   50   75   31    9   51   10   63   85   70
96   70   14   86   94   26   36   75   43   14
50   80   28   79    9   71   75   82   34   72
23    1   12   18   86   26   78    2   12   92
 5  100   99   56   61   25   95   56   64   55
27   59   35   87   77   74   45   85   73   16
91   65   31   50   73   31   19   75   65    7
17   56   19   34   46   71   33   13   70   33
97   40   84   14   62   67   16    4   64   56
26    4   33   82   67   83   74   21   83   80
29   50   75   31    9   51   10   63   85   70
96   70   14   86   94   26   36   75   43   14
50   80   28   79    9   71   75   82   34   72
23    1   12   18   86   26   78    2   12   92
 5  100   99   56   61   25   95   56   64   55
```

```
27   59   35   87   77   74   45   85   73   16
91   65   31   50   73   31   19   75   65    7
17   56   19   34   46   71   33   13   70   33
97   40   84   14   62   67   16    4   64   56
26    4   33   82   67   83   74   21   83   80
29   50   75   31    9   51   10   63   85   70
96   70   14   86   94   26   36   75   43   14
50   80   28   79    9   71   75   82   34   72
23    1   12   18   86   26   78    2   12   92
 5  100   99   56   61   25   95   56   64   55
27   59   35   87   77   74   45   85   73   16
91   65   31   50   73   31   19   75   65    7
17   56   19   34   46   71   33   13   70   33
97   40   84   14   62   67   16    4   64   56
26    4   33   82   67   83   74   21   83   80
29   50   75   31    9   51   10   63   85   70
96   70   14   86   94   26   36   75   43   14
50   80   28   79    9   71   75   82   34   72
23    1   12   18   86   26   78    2   12   92
 5  100   99   56   61   25   95   56   64   55
27   59   35   87   77   74   45   85   73   16
91   65   31   50   73   31   19   75   65    7
17   56   19   34   46   71   33   13   70   33
97   40   84   14   62   67   16    4   64   56
26    4   33   82   67   83   74   21   83   80
29   50   75   31    9   51   10   63   85   70
96   70   14   86   94   26   36   75   43   14
50   80   28   79    9   71   75   82   34   72
23    1   12   18   86   26   78    2   12   92
 5  100   99   56   61   25   95   56   64   55
27   59   35   87   77   74   45   85   73   16
91   65   31   50   73   31   19   75   65    7
17   56   19   34   46   71   33   13   70   33
97   40   84   14   62   67   16    4   64   56
26    4   33   82   67   83   74   21   83   80
29   50   75   31    9   51   10   63   85   70
70
```

          Main Menu

What would you like to do?: f

Enter a .txt filename (included file integerList.txt) blankFile.txt

Enter a .txt filename (included file integerList.txt) blankFile.txt

An invalid input was received from the file.
        Main Menu

Search for a value in the array - type 's'
Delete a value from the array - type 'd'
Overwrite a value in the array - type 'o'
Append a value to the array   - type 'a;
Retrieve a value from the array - type 'r'
Output the array to the screen - type 'p'
Enter a new file to be read   - type 'f'
Write array to a file   - type 'w'
Quit   - type 'q'

What would you like to do?: p

The array is empty.

        Main Menu

Search for a value in the array - type 's'
Delete a value from the array - type 'd'
Overwrite a value in the array - type 'o'
Append a value to the array   - type 'a;
Retrieve a value from the array - type 'r'
Output the array to the screen - type 'p'
Enter a new file to be read   - type 'f'
Write array to a file   - type 'w'
Quit   - type 'q'

What would you like to do?: a

Enter the new value 42

42 was added to the end of the array.

        Main Menu

Search for a value in the array - type 's'
Delete a value from the array - type 'd'
Overwrite a value in the array - type 'o'
Append a value to the array   - type 'a;
Retrieve a value from the array - type 'r'
Output the array to the screen - type 'p'
Enter a new file to be read   - type 'f'
Write array to a file   - type 'w'
Quit   - type 'q'

What would you like to do?: d

Enter the index of the value you want to delete. 0

Value at index 0 was 42 has been deleted. Now the value at that index is 42

        Main Menu

Search for a value in the array - type 's'
Delete a value from the array - type 'd'
Overwrite a value in the array - type 'o'
Append a value to the array   - type 'a;
Retrieve a value from the array - type 'r'
Output the array to the screen - type 'p'
Enter a new file to be read   - type 'f'

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Enter a new file to be read      - type 'f'
Write array to a file            - type 'w'
Quit                             - type 'q'

What would you like to do?: s

Enter the value you want to search for 1000

The value is not in the array.

        Main Menu

Search for a value in the array - type 's'
Delete a value from the array   - type 'd'
Overwrite a value in the array  - type 'o'
Append a value to the array     - type 'a;
Retrieve a value from the array - type 'r'
Output the array to the screen  - type 'p'
Enter a new file to be read      - type 'f'
Write array to a file            - type 'w'
Quit                             - type 'q'

What would you like to do?: s

Enter the value you want to search for 100

100 found at index 21

        Main Menu

Search for a value in the array - type 's'
Delete a value from the array   - type 'd'
Overwrite a value in the array  - type 'o'
Append a value to the array     - type 'a;
Retrieve a value from the array - type 'r'
Output the array to the screen  - type 'p'
Enter a new file to be read      - type 'f'
Write array to a file            - type 'w'
Quit                             - type 'q'

What would you like to do?: d

Enter the index of the value you want to delete. 21

Value at index 21 was 100 has been deleted. Now the value at that index is 99

        Main Menu

Search for a value in the array - type 's'
Delete a value from the array   - type 'd'
Overwrite a value in the array  - type 'o'
Append a value to the array     - type 'a;
Retrieve a value from the array - type 'r'
Output the array to the screen  - type 'p'
Enter a new file to be read      - type 'f'
Write array to a file            - type 'w'
Quit                             - type 'q'

What would you like to do?: r

Enter the index of the value you want to retrieve. 21

The value at index 21 is 99          Main Menu

Search for a value in the array - type 's'
Delete a value from the array   - type 'd'
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The value at index 21 is 99          Main Menu

Search for a value in the array - type 's'
Delete a value from the array   - type 'd'
Overwrite a value in the array  - type 'o'
Append a value to the array     - type 'a;
Retrieve a value from the array - type 'r'
Output the array to the screen  - type 'p'
Enter a new file to be read      - type 'f'
Write array to a file            - type 'w'
Quit                             - type 'q'

What would you like to do?: o

Enter the index of the value you want to overwrite. 21

Enter the new value 42

99 at index 21 replaced by 42

        Main Menu

Search for a value in the array - type 's'
Delete a value from the array   - type 'd'
Overwrite a value in the array  - type 'o'
Append a value to the array     - type 'a;
Retrieve a value from the array - type 'r'
Output the array to the screen  - type 'p'
Enter a new file to be read      - type 'f'
Write array to a file            - type 'w'
Quit                             - type 'q'

What would you like to do?: r

Enter the index of the value you want to retrieve. 21

The value at index 21 is 42          Main Menu

Search for a value in the array - type 's'
Delete a value from the array   - type 'd'
Overwrite a value in the array  - type 'o'
Append a value to the array     - type 'a;
Retrieve a value from the array - type 'r'
Output the array to the screen  - type 'p'
Enter a new file to be read      - type 'f'
Write array to a file            - type 'w'
Quit                             - type 'q'

What would you like to do?: p

 50   80   28   79    9   71   75   82   34   72
 23    1   12   18   86   26   78    2   12   92
  5   42   56   61   25   95   56   64   55   27
 59   35   87   77   74   45   85   73   16   91
 65   31   50   73   31   19   75   65    7   17
 56   19   34   46   71   33   13   70   33   97
 40   84   14   62   67   16    4   64   56   26
  4   33   82   67   83   74   21   83   80   29
 50   75   31    9   51   10   63   85   70   96
 70   14   86   94   26   36   75   43   14

        Main Menu

Search for a value in the array - type 's'
Delete a value from the array   - type 'd'
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          Main Menu

Search for a value in the array - type 's'
Delete a value from the array   - type 'd'
Overwrite a value in the array  - type 'o'
Append a value to the array     - type 'a';
Retrieve a value from the array - type 'r'
Output the array to the screen  - type 'p'
Enter a new file to be read     - type 'f'
Write array to a file           - type 'w'
Quit                            - type 'q'

What would you like to do?: a

Enter the new value 15

15 was added to the end of the array.

          Main Menu

Search for a value in the array - type 's'
Delete a value from the array   - type 'd'
Overwrite a value in the array  - type 'o'
Append a value to the array     - type 'a';
Retrieve a value from the array - type 'r'
Output the array to the screen  - type 'p'
Enter a new file to be read     - type 'f'
Write array to a file           - type 'w'
Quit                            - type 'q'

What would you like to do?: a

Enter the new value 16

16 was added to the end of the array.

          Main Menu

Search for a value in the array - type 's'
Delete a value from the array   - type 'd'
Overwrite a value in the array  - type 'o'
Append a value to the array     - type 'a';
Retrieve a value from the array - type 'r'
Output the array to the screen  - type 'p'
Enter a new file to be read     - type 'f'
Write array to a file           - type 'w'
Quit                            - type 'q'

What would you like to do?: p

   50   80   28   79    9   71   75   82   34   72
   23    1   12   18   86   26   78    2   12   92
    5   42   56   61   25   95   56   64   55   27
   59   35   87   77   74   45   85   73   16   91
   65   31   50   73   31   19   75   65    7   17
   56   19   34   46   71   33   13   70   33   97
   40   84   14   62   67   16    4   64   56   26
    4   33   82   67   83   74   21   83   80   29
   50   75   31    9   51   10   63   85   70   96
   70   14   86   94   26   36   75   43   14   15
   16

          Main Menu

Search for a value in the array - type 's'
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    4   33   82   67   83   74   21   83   80   29
   50   75   31    9   51   10   63   85   70   96
   70   14   86   94   26   36   75   43   14   15
   16

          Main Menu

Search for a value in the array - type 's'
Delete a value from the array   - type 'd'
Overwrite a value in the array  - type 'o'
Append a value to the array     - type 'a';
Retrieve a value from the array - type 'r'
Output the array to the screen  - type 'p'
Enter a new file to be read     - type 'f'
Write array to a file           - type 'w'
Quit                            - type 'q'

What would you like to do?: r

Enter the index of the value you want to retrieve. 100

The value at index 100 is 16          Main Menu

Search for a value in the array - type 's'
Delete a value from the array   - type 'd'
Overwrite a value in the array  - type 'o'
Append a value to the array     - type 'a';
Retrieve a value from the array - type 'r'
Output the array to the screen  - type 'p'
Enter a new file to be read     - type 'f'
Write array to a file           - type 'w'
Quit                            - type 'q'

What would you like to do?: q
```