Readme: To execute the code, run it via the solution provided in Visual Studio.

Examples of functions working:

Search:

```
Enter your selection below:
S to search the array.
M to modify the array.
A to add a number to the end of the array.
E to erase a number from the array.
Q to quit.
s
Enter the number you are looking for in the array.
1000000000
The index of the number you inputted is: -1

Enter your selection below:
S to search the array.
M to modify the array.
A to add a number to the end of the array.
E to erase a number from the array.
Q to quit.
s
Enter the number you are looking for in the array.
76
The index of the number you inputted is: 75
```

Modify:

```
Enter your selection below:
S to search the array.
M to modify the array.
A to add a number to the end of the array.
E to erase a number from the array.
Q to quit.
m
Enter the index you would like to replace:
50
Enter the number you would like to use:
600000
Old Value: 51
New Value: 600000
```

Addend:

```
a
Enter the number you would like to add to the end of the array:
700
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 600000 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 99 100 700
```

(same array as previous function demonstration.)

Erase:

```
e
Enter the index of the value you would like to be erased:
90
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 92 93 94 95 96 97 98 99 100
Number at 90 erased.
```

Examples of Exceptions being used for input validation:

```
Enter your selection below:
S to search the array.
M to modify the array.
A to add a number to the end of the array.
E to erase a number from the array.
Q to quit.
m
Enter the index you would like to replace:
1000
Enter the number you would like to use:
99
Index out of range. Try again!
```