This code has a menu loop, so that the user can continually use functions for the array.

The menu has 4 options, each respective to the functions outlined in the directions.

This is option 1, or "Q":

```
Q: Check index of given number
W: Change value of integer
E: Add integer to array
R: Remove integer / replace with 0


q

Enter a number to see its index:
50

The number 50 is in index 49.

The current array:
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

Q: Check index of given number
W: Change value of integer
E: Add integer to array
R: Remove integer / replace with 0
```

This is option 2, or "W":

```
The number 50 is in index 49.

The current array:
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

Q: Check index of given number
W: Change value of integer
E: Add integer to array
R: Remove integer / replace with 0

w
Enter replacement number:
101
Enter number to be replaced:
1
You replaced the value 1 with 101.
The current array:
101 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 4
3 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 8
3 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

Q: Check index of given number
W: Change value of integer
E: Add integer to array
R: Remove integer / replace with 0
```

Option 3, or "E":

```
sW
Enter replacement number:
101
Enter number to be replaced:
1
You replaced the value 1 with 101.
The current array:
101 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 4
3 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 8
3 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

Q: Check index of given number
W: Change value of integer
E: Add integer to array
R: Remove integer / replace with 0

e
Enter number to add to array: 102

The updated array:
101 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 4
3 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 8
3 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 102

Q: Check index of given number
W: Change value of integer
E: Add integer to array
R: Remove integer / replace with 0
```

Option 4 or "R", has 2 functions. Here is part A:

```
Enter number to add to array: 102

The updated array:
101 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 4
3 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 8
3 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 102

Q: Check index of given number
W: Change value of integer
E: Add integer to array
R: Remove integer / replace with 0

r
A: Replace number with 0
B: Remove number
a
Enter index:
2

The updated array:
101 2 0 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 4
3 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 8
3 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 102

Q: Check index of given number
W: Change value of integer
E: Add integer to array
R: Remove integer / replace with 0
```

And the other option "B" for this function:

```
C:\Users\joirc\OneDrive\Desktop\Programs C++\CS-303 Program 1\x64\Debug\CS-303 Program 1.exe

Q: Check index of given number
W: Change value of integer
E: Add integer to array
R: Remove integer / replace with 0

r
A: Replace number with 0
B: Remove number
b
Enter index:
0

The updated array:
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

Q: Check index of given number
W: Change value of integer
E: Add integer to array
R: Remove integer / replace with 0
```