The following logic error occurred while trying to test the code:

```
Enter a word or phrase: cat
Word or phrase is a palindrome.
```

Investigation led me to find this line of code to be the cause:

```
reverse_index = letter_count;
```

The error itself occurred when running this specific code:

```
(filtered_array[i] == filtered_array[(letter_count - reverse_index)])
```

The idea is to test if a char is the same as its opposite counterpart, (Letter_ count is the array's length), but, the line in the second screenshot would make the second argument be zero, the same value as i, so it just compares the same character to itself, instead of it's opposite.