

Palindrome ReflectionLogs -

Started by prompting the user to enter a string (could be a word, or a phrase). Afterwards the program changes it to where all the text is lowercase for checking.

```
Scanner Input = new Scanner(System.in);
System.out.print("Enter a string - ");
// Turns all text to lowercase for checking and removes spaces
String text = Input.next().replaceAll(" ", "").toLowerCase();
```

The program changes the input text to a character array, and sets a boolean value as true. Then I declare two integers which will serve as the number of characters/elements in the array.

```
// Changes text to a character array
char[] charArray = text.toCharArray();
boolean answer = true;

int left = 0;
int right = charArray.length - 1; // Final index value
```

As long as the left int is smaller than the right, the while loop runs. We don't have to worry about middle characters or elements because it will be the same from either side.

If any element does not match its right counterpart, sets boolean as false and breaks the loop.

```
while (left < right) {
    // If any left character is not equal to the right character
    // sets answer as fa
    if (charArray[left] != charArray[right]) {
        answer = false;
        break;
    }
    left++;
    right--;
}
```

Prints out the answer

```
// Display the result
if (answer == true) {
    System.out.println(text + " is a palindrome.");
} else {
    System.out.println(text + " is not a palindrome.");
}
```