

ReflectionLog: Palindrome

Youdis

```
//creating scanner object to record users input
Scanner input = new Scanner(System.in);
//creating variables to store users phrase and an array to store all the character of the phrase individually.
String phrase;
char[] phraseLetters;
//used to keep track of whether the phrase is a palindrome or not
boolean isPalindrome = true;
```

Creating scanner object and variables to store phrase user enters, an array which will store all the characters of the phrase individually and a variable to keep track of whether the phrase is a palindrome or not.

```
//prompting user to enter their phrase
System.out.print("Please enter your phrase: ");
//turning all the letters in the phrase to lower case so it is easier when we have to check if the reverse of the phrase is the same as the normal version
phrase = (input.nextLine()).toLowerCase();
//getting rid of all the spaces to make it simpler when checking every character with its counter part when reversed.
phrase = phrase.replaceAll("[^a-z]", "");
//making each character of the phrase into its own element in an array
```

Prompting the user for the phrase then turning into lower case and getting rid of all the spaces in the phrase to make sure code doesn't check spaces and doesn't mistake a letter to be different from its uppercase version.

```
//putting each character of the phrase into it's own element in an array
phraseLetters = phrase.toCharArray();
//checking if phrase is palindrome by checking if each character equals its counter part if the word was reversed.
for(int i = 0; i < phraseLetters.length; i++) {
    //is one character doesn't equal its reversed counterpart than the variable made from becomes false
    if(phraseLetters[i] != phraseLetters[phraseLetters.length - i-1]) {
        isPalindrome = false;
    }
}
```

Turing each letter in the phrase into an element in the array then using a for loop to check if every character in the array would stay in the same order if reversed. If not then the variable made to track if the phrase is palindrome would turn false.

```
//if the variable made to keep track of whether the phrase is a palindrome is false then will output the phrase isn't a palindrome
if (isPalindrome == false) {
    System.out.print("Your phrase is not a palindrome");
} else { //if the variable is true than will output that the phrase is a palindrome
    System.out.print("Your phrase is a palindrome");
}
```

If a variable made to check if the phrase is a palindrome is false then it will output to the user that their phrase is not a palindrome. If the variable is true then will output that the phrase is a palindrome