

ReflectionLog Palindrome

```
public static void main(String[] args) {  
    //Create scanner to get user input  
    Scanner input = new Scanner(System.in);  
  
    //Prompt user to enter a phrase  
    System.out.print("Please enter your phrase: ");  
  
    //Get the phrase, convert it to lowercase, and remove all non-alphabetical characters  
    String phrase = input.nextLine().toLowerCase().replaceAll("[^a-z]", "");  
  
    //Check if the phrase is a palindrome by comparing characters from both ends  
    boolean isPalindrome = true;
```

This code initializes a Scanner to take user input and prompts the user to enter a phrase. The phrase is then converted to lowercase and stripped of any non-alphabetical characters for easier comparison. A boolean variable isPalindrome is initialized to true to later check if the phrase is a palindrome by comparing characters from both ends.

```
    for (int i = 0; i < phrase.length() / 2; i++) {  
        if (phrase.charAt(i) != phrase.charAt(phrase.length() - i - 1)) {  
            isPalindrome = false;  
            break;  
        }  
    }  
  
    //Output result  
    if (isPalindrome) {  
        System.out.println("Your phrase is a palindrome");  
    } else {  
        System.out.println("Your phrase is not a palindrome");  
    }  
}
```

This code checks whether the phrase entered by the user is a palindrome by comparing characters from both ends. The loop

iterates through the first half of the string and compares each character with its counterpart from the other end. If any mismatch is found, it sets `isPalindrome` to false and exits the loop. Finally, the program outputs whether the phrase is a palindrome based on the value of `isPalindrome`.