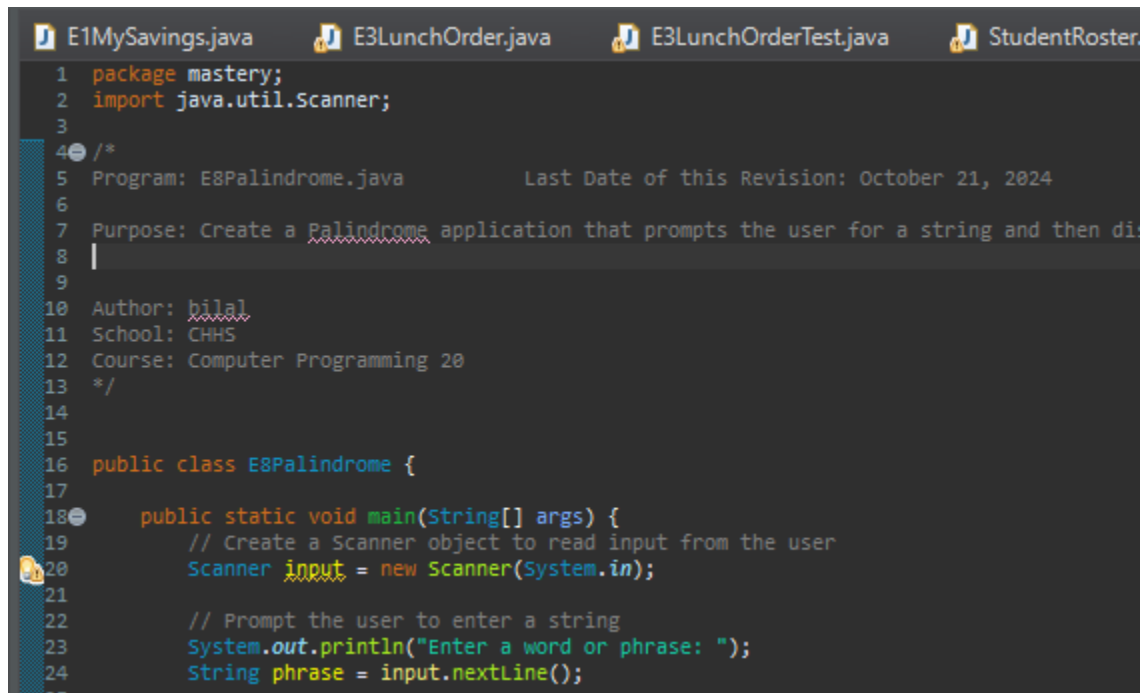


Credit
2120
Assignment
E8Palindrome

Create a Palindrome application that prompts the user for a string and then displays a message indicating whether or not the string is a palindrome.

How has your program changed from planning to coding to now? Please explain?

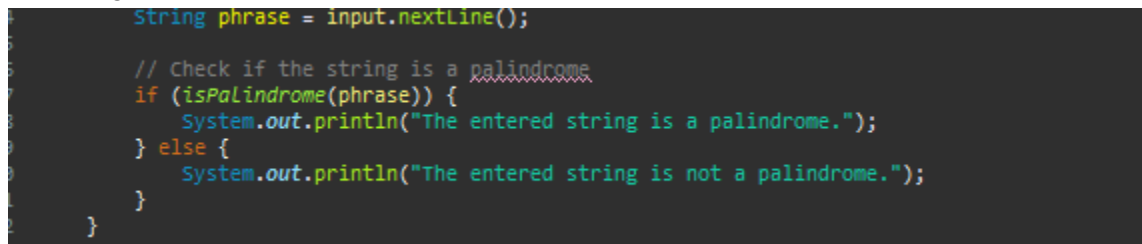
Created input



```
1 package mastery;
2 import java.util.Scanner;
3
4 /*
5  Program: E8Palindrome.java          Last Date of this Revision: October 21, 2024
6
7  Purpose: Create a Palindrome application that prompts the user for a string and then di
8  |
9
10 Author: hilal
11 School: CHHS
12 Course: Computer Programming 20
13 */
14
15
16 public class E8Palindrome {
17
18     public static void main(String[] args) {
19         // Create a Scanner object to read input from the user
20         Scanner input = new Scanner(System.in);
21
22         // Prompt the user to enter a string
23         System.out.println("Enter a word or phrase: ");
24         String phrase = input.nextLine();
25     }
26 }
```

And prompt

Checking if palindrome



```
String phrase = input.nextLine();
// Check if the string is a palindrome
if (isPalindrome(phrase)) {
    System.out.println("The entered string is a palindrome.");
} else {
    System.out.println("The entered string is not a palindrome.");
}
}
```

Method for checking if palindrome

Final code

```
1 import java.util.Scanner;
2
3
4 /*
5  Program: E8Palindrome.java          Last Date of this Revision: October 21, 2024
6
7  Purpose: Create a Palindrome application that prompts the user for a string and then displays
8
9
10 Author: hilar
11 School: CHHS
12 Course: Computer Programming 20
13 */
14
15 public class E8Palindrome {
16
17     public static void main(String[] args) {
18         // Create a Scanner object to read input from the user
19         Scanner input = new Scanner(System.in);
20
21         // Prompt the user to enter a string
22         System.out.println("Enter a word or phrase: ");
23         String phrase = input.nextLine();
24
25         // Check if the string is a palindrome
26         if (isPalindrome(phrase)) {
27             System.out.println("The entered string is a palindrome.");
28         } else {
29             System.out.println("The entered string is not a palindrome.");
30         }
31     }
32
33     // Method to check if a string is a palindrome
34     public static boolean isPalindrome(String str) {
35         // Remove all non-alphabetic characters and convert to lowercase
36         String cleanedStr = str.replaceAll("[^a-zA-Z]", "").toLowerCase();
37
38         // Reverse the cleaned string
39         String reversedStr = new StringBuilder(cleanedStr).reverse().toString();
40
41         // Check if the cleaned string is equal to its reverse
42         return cleanedStr.equals(reversedStr);
43     }
44 }
```