CHAPTER 9 REFLECTION LOG (PALINDROME)

```java
import java.util.Scanner;

public class Palindrome {

    public static void main(String[] args) {

        Scanner input = new Scanner(System.in); //import scanner for user input

        String User_input;
        boolean palindrome = true;

        System.out.println("Enter a string, this program will tell you if it's a palindrome or not.");
        User_input = input.next().toLowerCase(); //Get user input, in lower case so when its converted

        char[] StringArray = User_input.toCharArray(); //converts the string into an array
```

So far, I have added the ability for user input, declared a string variable that will get the user's input string, declared a boolean as true for now, and created an array. The code prompts the user for a string, which is converted into lowercase to avoid errors, and then transformed into an array.

```java
for (int i = 0; i < StringArray.length / 2; i++) {

    if (StringArray[i] != StringArray[StringArray.length - 1 - i]) {
        palindrome = false;
    }
}

if (palindrome == true) {
    System.out.println("Your string is a palindrome.");
}
else {
    System.out.println("Your string isn't a palindrome.");
}
```

To finish the code, I added a for-loop checking the letters starting from the beginning and the end, if the first letter doesn't match the last letter, or the second letter doesn't match the second letter, and so forth, it will not be a palindrome. The boolean declared earlier is used to display to the user whether their string is or isn't a palindrome.