Reflection log

```
package mastery;

import java.util.Scanner;

public class Palindrome {
```

Imports scanner and creates class

```
public static void main(String[] args) {
    //Lets the user input values
    Scanner in = new Scanner(System.in);

    //prompting user input
    System.out.print("Enter your phrase: ");
```

Creates new scanner object to record input and prompts user to enter a phrase

```
String phrase = (in.nextLine()).toLowerCase();
```

Turning all the letters from the user inputted phrase into lower case so that the input isn't case sensitive

```
phrase = phrase.replaceAll("[^a-z]", "");
```

Removes everything within the phrase that is not a letter so things like spaces or punctuation like commas and periods

```
char[] letters = phrase.toCharArray();
```

Makes it so that each letter in the phrase gets its own element in the array

```
boolean palindrome = true;

//check if phrase is palindrome by checking if each cha
for(int i = 0; i < letters.length; i++) {

    //is one character doesn't equal its reversed count
    if(letters[i] != letters[letters.length - i-1]) {
        palindrome = false;
    }
```

Initialize boolean variable to check if phrase is palindrome or not later on

For loop that runs the loop for however long the phrase is to check all characters and within the for loop is an if statement that takes the letters that are within the array to check if the phrase is not a palindrome

If the phrase meets the if statement conditions then it is not a palindrome and makes the boolean variable false

```
if (palindrome == false) {
    System.out.print("The phrase entered is not a palindrome");
}

//if palindrome is true then it will output that the phrase is 
else {
    System.out.print("The phrase entered is a palindrome");
```

If the boolean variable was changed to false then it tells the user that their phrase is not a palindrome

If the boolean variable remained true then it tells the user that their phrase is a palindrome