Reflection Log

```
14  package Mastery;
15
16  import java.util.Scanner;
17
18  public class GroupAssignment {
19
```

Here I imported the Scanner for the code.

```
20⊖      public static void main(String[] args) {
21           // Create a Scanner object for user input
22           Scanner userInput = new Scanner(System.in);
```

Here I created a new scanner for the program.

```
// Prompt the user for their first and last name
System.out.print("Enter your first name: ");
String firstName = userInput.nextLine();

System.out.print("Enter your last name: ");
String lastName = userInput.nextLine();
```

This is where the program prompts the user for their first and last name.

```
// Get the first letter of the last name and convert it to uppercase
char firstLetter = Character.toUpperCase(lastName.charAt(0));
```

The program then takes the first letter from both your first and last names.

```
// Determine the group assignment based on the first letter of the last name
String group;
if (firstLetter >= 'A' && firstLetter <= 'I') {
    group = "Group 1";
} else if (firstLetter >= 'J' && firstLetter <= 'S') {
    group = "Group 2";
} else if (firstLetter >= 'T' && firstLetter <= 'Z') {
    group = "Group 3";
} else {
    group = "Unknown Group"; // Edge case handling
}
```

Then the program checks to see which group the user's name will be in. Group 1 for A to I, Group 2 for J to S, Group for T to Z.

```
// Display the group assignment
System.out.println(firstName + " " + lastName + " is assigned to " + group + ".");
```

Then the program displays the user's group back to the user.

```
        // Close the scanner to avoid resource leak
        userInput.close();
    }
}
```

The scanner is closed.