

Credit Name: CSE 2nd Language Programming Credit
Assignment Name: GroupAssignment Assignment

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

The planning for this assignment was to do if/else conditions to determine the assignment for the letter, but what changed to coding now is trimming any spaces and as well as determining if what the user inputted is valid or not.

```
System.out.print("Enter your full name: ");
String fullName = scanner.nextLine().trim(); // Trim any leading/trailing spaces.

// Extracts the last name by splitting the full name.
String[] nameParts = fullName.split(" ");
String lastName = "";
if (nameParts.length > 0) {
    lastName = nameParts[nameParts.length - 1];
}
```

I asked the user for their full name while trailing and spaces and then I split it so i could determine the first letter of the "lastname" and put it as a variable.

```
// This code sets the "firstLetterOfLastName" variable to the first character of the last name.
char firstLetterOfLastName = lastName.isEmpty() ? ' ' : lastName.charAt(0);
int groupNumber;

// Assigns the group based on the first letter of the last name. Determined by conditions.
if (firstLetterOfLastName >= 'A' && firstLetterOfLastName <= 'I') {
    groupNumber = 1;
} else if (firstLetterOfLastName >= 'J' && firstLetterOfLastName <= 'S') {
    groupNumber = 2;
} else if (firstLetterOfLastName >= 'T' && firstLetterOfLastName <= 'Z') {
    groupNumber = 3;
} else {
    groupNumber = 0; // If it's an invalid last name.
}
```

This is where the important part of the program is. Once the program receives the letter of the "lastname" it'll now go through the conditions determining the group number.

```
// Tells the user if the letter is valid or not. If it is valid, it'll introduce the user to the assignment.
if (groupNumber == 0) {
    System.out.println("Invalid last name. Please enter a valid last name.");
} else {
    System.out.println("Hello, " + fullName + "! You are assigned to Group " + groupNumber + ".");
}

scanner.close();
```

This is where the program checks if what the user inputted is valid or not. If it is it'll display what group number the user will be in.