

Reflection Log

```
1 package Mastery;
2
3 public class Num {
4     private int number;
5 }
```

This code defines the Num class within the Mastery package, encapsulating a private integer variable number. The class is designed to store and manage numerical data, likely providing methods to manipulate or access this value securely.

```
6 // Constructor
7 public Num(int number) {
8     this.number = number;
9 }
10
```

This code defines a constructor for the Num class that takes an integer parameter number and assigns it to the class's private field using this.number. It ensures that the Num object is initialized with a specific value when created.

```
--
11 // Get the ones digit
12 public int getOnesDigit() {
13     return Math.abs(number % 10);
14 }
15
16 // Get the tens digit
17 public int getTensDigit() {
18     return Math.abs((number / 10) % 10);
19 }
20
21 // Get the hundreds digit
22 public int getHundredsDigit() {
23     return Math.abs((number / 100) % 10);
24 }
25
26 // Get the whole number
27 public int getNumber() {
28     return number;
29 }
30 }
```

This part of the code defines four methods to extract and handle different digits of an integer variable number. The getOnesDigit, getTensDigit, and getHundredsDigit methods isolate the respective digits by using mathematical operations like modulus and division, ensuring the result is non-negative by applying Math.abs(). Lastly, the getNumber method simply returns the entire value of the integer variable number.

