Credit Name: CSE 3120 Object Oriented Programming 1
Assignment Name: Digit Extractor Mastery Project

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

When I began the DigitExtractor project, I already knew I would have to create two separate classes: Num and DigitExtractor. The Num class was all about extracting digits; on the other hand, DigitExtractor was the main program that took care of user interaction with the app and how it worked.

While writing the code I followed this structure without changing it. I had to think over the way in which the Num class would analyze the number by making it a private field and expose its functionality via public methods like getOnesDigit, getTensDigit, and getHundredsDigit.

```java
    // Method to get the whole number
    public int getWholeNumber() {
        return number;
    }

    // Method to get the ones digit
    public int getOnesDigit() {
        return Math.abs(number % 10);
    }

    // Method to get the tens digit
    public int getTensDigit() {
        return Math.abs((number / 10) % 10);
    }

    // Method to get the hundreds digit
    public int getHundredsDigit() {
        return Math.abs((number / 100) % 10);
    }
}
```

This made sure that the class followed the principles of encapsulation yet remained straightforward. In the DigitExtractor class, I implemented a menu-driven interface in a very similar format to the one provided in the book to receive user input and clearly and easily display the results if needed.