

Reflection Logs

Credit name: Chapter 7

Assignment Name: Mastery - DigitExtractor

```
public DigitExtractor() {  
    number = 0; //Default number//  
}  
public DigitExtractor(int Num) {  
    number = Num;  
}  
public void setNumber(int Num) {  
    number = Num; //Set the number//  
}
```

Set the number which is the number inserted into the program.

```
public int getNumber() {  
    return number;  
}  
public int getOnes() {  
    ones = number % 10; //Calculate the ones place value//  
    return ones;  
}  
public int getTens() {  
    int NumNone = (number-ones)/10;  
    tens = NumNone%10;  
    return tens; //Calculate the tens place value//  
}  
public int getHundreds() {  
    int NumNone = (number-ones)/10;  
    hundreds = (NumNone-tens)/10;  
    return hundreds; //Calculate the hundreds place value//  
}
```

Sets getNumber(), getOnes(), getTens(), and getHundreds() method to return to the whole number, the ones place value, the tens value, and hundreds value when the user chooses.

```
Scanner userInput = new Scanner (System.in);  
DigitExtractor NUM = new DigitExtractor();  
String userChoice;  
String quit;  
do {  
    System.out.print("Enter the number: ");  
    NUM.setNumber(userInput.nextInt());  
  
    System.out.println("show (W)hole number: ");  
    System.out.println("show (O)nes place number. ");  
    System.out.println("show (T)ens place number. ");  
    System.out.println("show (H)undreds place number.");  
    System.out.println("(Q)uit");  
    System.out.print("Enter your choice: ");  
    userChoice = userInput.next(); //Prompts user the options
```

Prompts the user about the options and asks the user for their choice.

```

if (whole.contains(userChoice)) {
    System.out.println("This is a whole number: "+NUM.getNumber());
    System.out.println("-----");
}
else if (one.contains(userChoice)) {
    System.out.println("Ones place value in the number is: "+NUM.getOnes());
    System.out.println("-----");
}
else if (ten.contains(userChoice)) {
    System.out.println("Tens place value in the number is: "+NUM.getTens());
    System.out.println("-----");
}
else if (hundred.contains(userChoice)) {
    System.out.println("Hundreds place value in the number is: "+NUM.getHundreds());
    System.out.println("-----");
}
}while(!quit.contains(userChoice));
System.out.print("End of program.");           //Decide what program will do depend on

```

The if statement for program to decide what to do next, what should print out for the user.