

ReflectionLogs - MySavings[Mastery]

```
package Mastery;

import java.util.Scanner;

public class DigitExtractor {

    public static void main(String[] args) {

        Scanner input = new Scanner(System.in);
        // import for user input

        String choice;
```

So far I created the DigitExtractor class, and added a main method along with the ability to take input. I also created the string choice variable which will be used later.

```

String choice;

System.out.print("Enter an integer: ");
Digit digit = new Digit(input.nextInt()); //variable

while (true)
{

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.println(" ");
System.out.println("Enter your choice");

choice = input.next();
choice = choice.toLowerCase();

```

```

package Mastery;

public class Digit {

    private int number;

    public Digit(int digit){
        number = digit;
    }

    public int Whole() {
        return number;
    }

    public int Hundreds() {
        return (number / 100) %10;
    }

    public int tens() {
        return (number / 10)%10;
    }

    public int ones() {
        return number % 10;
    }
}

```

Next I added a message to prompt the user for an integer, and created a variable which I will use to link to the constructor methods in the Digit class I created. In the Digit class, I added all the different calculations, and in the DigitExtractor class I prompted the user for their choice in a while statement which will be used to loop later.

```
        if (choice.equals("w"))
        {
            System.out.println(digit.Whole());
        }
        if (choice.equals("h"))
        {
            System.out.println(digit.Hundreds());
        }
        if (choice.equals("t"))
        {
            System.out.println(digit.tens());
        }
        if (choice.equals("o"))
        {
            System.out.println(digit.ones());
        }

        if (choice.equals("q"))
        {
            break;
        }
    }

}
```

Finally I finished the while statement by adding if statements, which occur depending on the user's imputed choice. They then link to the digit class, and do the calculation, and then display the calculation, and then the code loops until the user choice is equal to q for quit.

