

Reflection Log - Reflect on lines of code as you write

I started the code by copy and pasting my digits skillbuilder code so I can begin adding on. So far I have declared the variable for the user's input 2 digit number as an integer. This user number is taken and divided by 10, which gives me an integer value of the number in the tens place excluding the decimal. For the one's place, I took the user input number, and used the modulus operator to grab the remainder when the number is divided by 10, which gives me the value of the one's place. Now I will add on to the code, and modify it for the three digit number task.

```
package Mastery;

import java.util.Scanner;

public class DigitsMastery {

    public static void main(String[] args)
    {
        Scanner userInput = new Scanner(System.in);

        System.out.print("Please enter a 2 digit number: ");
        int user_numb = userInput.nextInt();

        System.out.println("The number you have entered is " + user_numb + ".");

        int tens_place = user_numb / 10;

        System.out.println("The tens place digit is: " + tens_place + ".");

        int ones_place = user_numb % 10;

        System.out.println("The ones place digit is: " + ones_place + ".");

    }
```

I have changed the prompt to ask the user for a 3 digit number rather than a 2 digit number. I have kept most things the same, but just added a new variable being (`int hundreds_place`). This variable will take the user input number and divide it by 10, and then do that again with the new value to get the hundreds place digit. For the `tens_place` variable, I have modified my code to first take the user input number, and divide that by 10, and then take the remainder of dividing the value it just got by 10 again to get the tens place digit. The `ones_place` variable stayed completely unchanged.

```
1 package Mastery;
2
3 import java.util.Scanner;
4
5 public class DigitsMastery {
6
7     public static void main(String[] args)
8     {
9         Scanner userInput = new Scanner(System.in);
10
11         System.out.print("Please enter a 3 digit number: ");
12         int user_numb = userInput.nextInt();
13
14
15
16         System.out.println("The number you have entered is " + user_numb + ".");
17
18         int hundreds_place = user_numb / 10;
19         hundreds_place /= 10;
20
21         System.out.println("The hundreds place digit is: " + hundreds_place + ".");
22
23         int tens_place = user_numb / 10;
24         tens_place %= 10;
25
26         System.out.println("The hundreds place digit is: " + tens_place + ".");
27
28         int ones_place = user_numb % 10;
29
30         System.out.println("The ones place digit is: " + ones_place + ".");
31     }
32 }
33
34
35 }
36
```