

```

package Mastery;

import java.util.Scanner;

public class DigitsMastery {

    public static void main(String[] args) {

        Scanner userInput = new Scanner(System.in);

        System.out.print("Enter a 3 digit number: ");
        int number = userInput.nextInt();

        int hundreds = number / 100;

        int tens = number / 10;

        int ones = number % 10;

        System.out.print("Hundreds: " + hundreds);
        System.out.print("Tens: " + tens);
        System.out.print("Ones: " + ones);

    }
}

```

```

Enter a 3 digit number: 152
Hundreds: 1Tens: 15Ones: 2

```

Logical Error:

Variable [int tens] is improperly defined, by dividing by ten we only remove the ones digit, resulting in the output of 15.

In order to account for this we need to modulo by ten after the original division to account for the hundreds digit.

```
package Mastery;

import java.util.Scanner;

public class DigitsMastery {

    public static void main(String[] args) {

        Scanner userInput = new Scanner(System.in);

        System.out.print("Enter a 3 digit number: ");
        int number = userInput.nextInt();

        int hundreds = number / 100;

        int tens = number / 10 % 10;

        int ones = number % 10;

        System.out.println("Hundreds: " + hundreds);
        System.out.println("Tens: " + tens);
        System.out.print("Ones: " + ones);

    }
}
```

```
Enter a 3 digit number: 152
Hundreds: 1
Tens: 5
Ones: 2
```