Solution Review: Sum of Digits in an Integer

In this review, solution of the challenge 'Sum of Digits in an Integer' from the previous lesson is provided.

We'll cover the following

Solution

```
class SumDigits {
    public static int sumOfDig(int var) {
        int result = 0; //variable for resultant sum
        int lastDigit = 0;
        while (var > 0) {
            //seclude & keep adding the last digit into result
            lastDigit = var % 10;
            result = result + lastDigit;
            System.out.println("Last Digit: " +  lastDigit);
            System.out.println("Sum: " +  result);
            var /= 10; //update the new value of var
            System.out.println("Number: " + var);
        }
        return result;
    }
    public static void main( String args[] ) {
        int number = 1745;
        System.out.println("Number: " + number);
        System.out.println( "Sum of digits in 1024 is: "+ sumOfDig(number) );
    }
}
```

Understanding the code

- **Line 3:** We start by declaring an `int result` variable to store the *sum*.

- **Line 7-8:** To add the digits one by one to the result we will take the remainder from division of `var` by 10 to get the last digit and add it to the `result`.

- **Line 11:** After separating and adding the last digit of the `var` to the `result`, we update the `var` by dividing it by 10. In this way, the value in `var` gets lesser and lesser after each iteration and we use the condition `var > 0` in the `while` loop.
- **Line 14:** At the end we have the resultant sum of digits in the `result` variable and *return* it from the method.

In the next solve we will solve a challenge related to Strings.