

# Square Every Digit

Welcome. In this kata, you are asked to square every digit of a number and concatenate them.

For example, if we run 9119 through the function, 811181 will come out, because 9<sup>2</sup> is 81 and 1<sup>2</sup> is 1.

**Note:** The function accepts an integer and returns an integer

My solution:

```
export class Kata {
  static squareDigits(num: number) {
    let digit:string = ""+num
    let final:string = ""
    for(let i:number = 0; i < digit.length; i++) {
      final += Number(digit[i]) ** 2
    }
    return Number(final)
  }
}
```

Best practice/Clever

```
export class Kata {
  static squareDigits(num: number) {
    return +num.toString()
      .split('')
      .map(n => Math.pow(+n,2))
      .join('');
  }
}
```

The best solution converted the number into a string `+num.toString()`, converted it into an array of characters `.split('')`. The `.map(n => Math.pow(+n,2))` line iterates through each element of the array and squares them. `.join('')` combines all of the elements of an array into a string