# Coding Challenges

**Write a function that will return an array of all possible divisors of the input number.**

**For example:** getDivisors(12)

**Would return:** [1,2,3,4,6,12]

```
/**
 * Generates a list of divisors of teh given number.
 *
 * @param {number} num - The number to check.
 * @returns {array} A list of integer divisors.
 */
function getDivisors(num) {
    // ...
}
```

1. Create a function with one parameter. Have the function console.log() the input.
2. Define an array named divisors.
3. Create a loop that iterates n number of times.
4. In each iteration check if the number is divisible by i.
5. If the number is divisible by i, add it to the divisors array.
6. Return the divisors array.

# What is the fewest number of loop iterations required to achieve this?

**What are the divisors of 100?**

**1, 2, 4, 5, 10, 20, 25, 50, 100**

**Every number has a divisor of 1 and itself:**

**1, 2, 4, 5, 10, 20, 25, 50, 100**

**What do you notice about the rest of the divisors:**

**1, 2, 4, 5, 10, 20, 25, 50, 100**

**Look at the divisor pairs:**

**2 (50), 4 (25), 5 (20), 10 (10), 20 (5), 25 (4), 50 (2)**