Problem 3099: Harshad Number

Problem Information

Difficulty: Easy
Acceptance Rate: 83.30%
Paid Only: No
Tags: Math

Problem Description

An integer divisible by the **sum** of its digits is said to be a **Harshad** number. You are given an integer `x`. Return _the sum of the digits_ of __`x` __ if __`x` __ is a **Harshad** number, otherwise, return __`-1` _._

Example 1:

Input: x = 18

Output: 9

Explanation:

The sum of digits of `x` is `9`. `18` is divisible by `9`. So `18` is a Harshad number and the answer is `9`.

Example 2:

Input: x = 23

Output: -1

Explanation:

The sum of digits of `x` is `5`. `23` is not divisible by `5`. So `23` is not a Harshad number and the answer is `-1`.

Constraints:

* `1 <= x <= 100`

Code Snippets

C++:

```
class Solution {
public:
int sumOfTheDigitsOfHarshadNumber(int x) {

}
};
```

Java:

```
class Solution {
public int sumOfTheDigitsOfHarshadNumber(int x) {

}
}
```

Python3:

```
class Solution:
def sumOfTheDigitsOfHarshadNumber(self, x: int) -> int:
```