Problem 1056: Confusing Number

Problem Information

Difficulty: Easy
Acceptance Rate: 49.26%
Paid Only: Yes
Tags: Math

Problem Description

A **confusing number** is a number that when rotated `180` degrees becomes a different number with **each digit valid**.

We can rotate digits of a number by `180` degrees to form new digits.

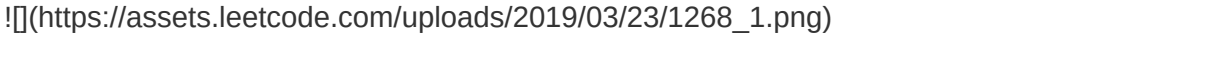
* When `0`, `1`, `6`, `8`, and `9` are rotated `180` degrees, they become `0`, `1`, `9`, `8`, and `6` respectively. * When `2`, `3`, `4`, `5`, and `7` are rotated `180` degrees, they become **invalid**.

Note that after rotating a number, we can ignore leading zeros.

* For example, after rotating `8000`, we have `0008` which is considered as just `8`.

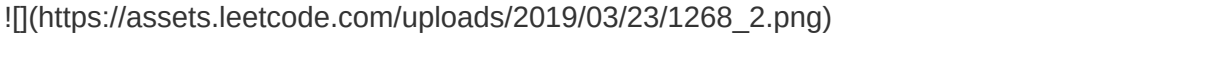
Given an integer `n`, return `true` _if it is a**confusing number** , or _`false` _otherwise_.

Example 1:



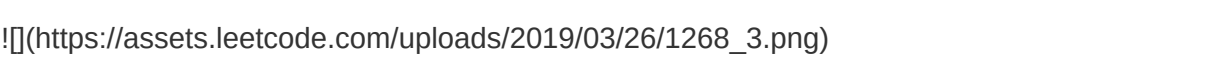
Input: n = 6 **Output:** true **Explanation:** We get 9 after rotating 6, 9 is a valid number, and 9 != 6.

Example 2:



Input: n = 89 **Output:** true **Explanation:** We get 68 after rotating 89, 68 is a valid number and 68 != 89.

Example 3:



Input: n = 11 **Output:** false **Explanation:** We get 11 after rotating 11, 11 is a valid number but the value remains the same, thus 11 is not a confusing number

Constraints:

* `0 <= n <= 109`

Code Snippets

C++:

```
class Solution {
public:
bool confusingNumber(int n) {

}
};
```

Java:

```
class Solution {
public boolean confusingNumber(int n) {

}
}
```

Python3:

```
class Solution:
def confusingNumber(self, n: int) -> bool:
```