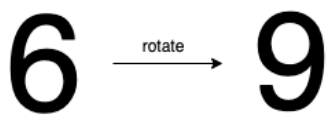
PL-2022-C-Confusing Number

locked

Given a number N, return true if and only if it is a confusing number, which satisfies the following condition:

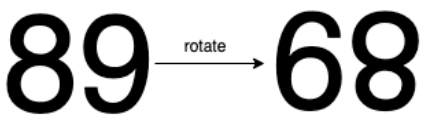
We can rotate digits by 180 degrees to form new digits. When 0, 1, 6, 8, 9 are rotated 180 degrees, they become 0, 1, 9, 8, 6 respectively. When 2, 3, 4, 5 and 7 are rotated 180 degrees, they become invalid. A confusing number is a number that when rotated 180 degrees becomes a different number with each digit valid.

Example 1:



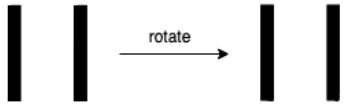
Input: 6 Output: true Explanation: We get 9 after rotating 6, 9 is a valid number and 9!=6.

Example 2:



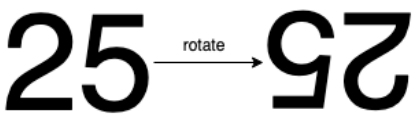
Input: 89 Output: true Explanation: We get 68 after rotating 89, 86 is a valid number and 86!=89.

Example 3:



Input: 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.

Example 4:



Input: 25 Output: false Explanation: We get an invalid number after rotating 25.

Note: 1. 0 <= N <= 10^9 2. After the rotation we can ignore leading zeros, for example if after rotation we have 0008 then this number is considered as just 8.

Input Format

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Constraints

-

Output Format

-

Sample Input 0

```
6
```

Sample Output 0

```
true
```

Explanation 0

We get 9 after rotating 6, 9 is a valid number and 9!=6.

Sample Input 1

```
89
```

Sample Output 1

```
true
```

Explanation 1

We get 68 after rotating 89, 86 is a valid number and 86!=89.

Sample Input 2

```
11
```

Sample Output 2

```
false
```

Explanation 2

We get 11 after rotating 11, 11 is a valid number but the value remains the same, thus 11 is not a confusing number.

Sample Input 3

```
25
```

Sample Output 3

```
false
```

Explanation 3

We get an invalid number after rotating 25.

Submissions: 612
Max Score: 100
Difficulty: Medium

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C

```c
#include <stdio.h>
#include <string.h>
#include <math.h>
#include <stdlib.h>

int main() {

   /* Enter your code here. Read input from STDIN. Print output to STDOUT */
    int a,d,r;
        scanf("%d",&a);
    d=a/10;
    r=a%10;
     if(d==0 || d==6 ||d==8 ||d==9 || r==0 ||r==6 ||r==8||r==9)
     {
         printf("true");
     }
    else
    {
        printf("false");
    }

    return 0;
}

```

Line: 1 Col: 1

Upload Code as File Test against custom input Run Code Submit Code