

202. Happy Number

Description

Write an algorithm to determine if a number `n` is happy.

A **happy number** is a number defined by the following process:

- Starting with any positive integer, replace the number by the sum of the squares of its digits.
- Repeat the process until the number equals 1 (where it will stay), or it **loops endlessly in a cycle** which does not include 1.
- Those numbers for which this process **ends in 1** are happy.

Return `true` if `n` is a happy number, and `false` if not.

Example 1:

```
Input: n = 19
Output: true
Explanation:
12 + 92 = 82
82 + 22 = 68
62 + 82 = 100
12 + 02 + 02 = 1
```

Example 2:

```
Input: n = 2
Output: false
```

Constraints:

- `1 <= n <= 231 - 1`

