202. Happy Number

正常做法, 用一个hashset看看有没有重复, 其实也可以用linkedList判断有没有环的快慢指针做法.

```java
public boolean isHappy(int n) {
    HashSet<Integer> set = new HashSet();
    int sum = 0;
    while(set.add(n)){
        while(n > 0){
            int digit = n % 10;
            sum += digit * digit;
            n /= 10;
        }
        if(sum == 1) return true;
        n = sum;
        sum = 0;
    }
    return false;
}
```

快慢指针

```java
public boolean isHappy(int n) {
    int slow = n, fast = n;
    do{
        fast = getNextHappyNumber(fast);
        if(fast == 1) return true;
        fast = getNextHappyNumber(fast);
        slow = getNextHappyNumber(slow);
    }while(fast != slow);
    return false;
}
public int getNextHappyNumber(int n){
    int res = 0;
    while(n > 0){
        int digit = n % 10;
        n = n / 10;
        res += digit * digit;
    }
    return res;
}
```