

2. Write a program to check the given no is Armstrong or not using recursive function.

Program:

```
def order(n):  
    count = 0  
    while n != 0:  
        count += 1  
        n //= 10  
    return count  
  
def is_armstrong(n, order):  
    if n == 0:  
        return 0  
    else:  
        return ((n % 10) ** order) + is_armstrong(n // 10, order)  
  
num = int(input("Enter a number: "))  
order_num = order(num)  
  
if num == is_armstrong(num, order_num):  
    print(num, "is an Armstrong number.")  
else:  
    print(num, "is not an Armstrong number.")
```

Input: **Enter a number: 153**

Output: **153 is an Armstrong number.**

Time Complexity:  $O(\log(n))$