In [5]:
```
# Python Program to check Armstrong Number?
# An Armstrong number of 3 digits, the sum of cubes of each digit is equal to the number
# HINT : 153 = 1*1*1 + 5*5*5 + 3*3*3  // 153 is an Armstrong number

# Input from the user "Number between 0 to 999"
num = int(input("Enter a number: "))

# initializing sum with start value as 0
sum = 0

# finding the sum of the cube of each digit.
number = num
while number > 0:
   value = number % 10
   sum += value ** 3
   number //= 10

# displaying the result
if num == sum:
   print(num,"is an Armstrong number")
else:
   print(num,"is not an Armstrong number")
```

```
Enter a number: 153
153 is an Armstrong number
```

In [6]:
```
# Python Program for How to check if a given number is Fibonacci number?
#HINT : A Fibonacci sequence is the integer sequence of 0, 1, 1, 2, 3, 5, 8....
        #The first two terms are 0 and 1.
        #All other terms are obtained by adding the preceding two terms.
        #This means to say the nth term is the sum of (n-1)th and (n-2)th term.

nterm = int(input("How many terms? "))

# first two terms
n1, n2 = 0, 1
count = 0

# check if the number of terms is valid
if nterm <= 0:
   print("Please enter a positive integer")
# if there is only one term, return n1
elif nterm == 1:
   print("Fibonacci sequence upto",nterm,":")
   print(n1)
# generate fibonacci sequence
else:
   print("Fibonacci sequence:")
   while count < nterm:
       print(n1)
       nth = n1 + n2
       # update values
       n1 = n2
       n2 = nth
       count += 1

nterm = "Fibonacci number" if nterm == nth else "Non Fibonacci number"
print(nterm)
```

```
How many terms? 9
Fibonacci sequence:
0
1
1
2
3
5
8
13
21
Non Fibonacci number
```