In [5]:
```python
#program to find out whether a number is an Armstrong number or not

num = int(input("Enter a number : "))               #taking user input
exp = len(str(num))                                 # evaluating the lenght of the given number
original = num                                      #storing the original number for comparision
sum = 0                                             # initialising sum
while num > 0:                                      #initialising the loop for iteration
        digit = num % 10                            #isolating the last digit
        sum += digit**exp                           #adding the last digit to the power of no. of digits to sum
        num = num // 10                             #truncating the last digit for next iteration

if(sum == original):                                # comparing the sum with the given number
    print("the number is an Armstrong Number")      #result if true
else:
    print("the number is not an Armstrong Number")  #result if false
```

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

In [8]:
```python
#program to print Fibonacci sequence upto n numbers
num = int(input("Enter number of elements required in Fibonacci sequence: ")) #taking user input
if (num>0):                                                                   #checking validity of input
    n1 = 0                                                                    #initialising  sequence
    n2 = 1                                                                    #initialising second term of seq
    temp = 0                                                                  #temporary variable for iteration
    for n in range(num):                                                      #initialising iteration
        print(n1, end = " ")                                                  #printing the sequence
        temp = n1                                                             #updating temporary variable
        n1 = n2                                                               #updating first var for next iteration
        n2 = temp+n2                                                          #updating second var for next iteration
else:
    print("invalid input")                                                    #returning invalid entry
```

```
Enter number of elements required in Fibonacci sequence: 10
0 1 1 2 3 5 8 13 21 34
```