ASSIGNMENT 1

Python Program to check Armstrong Number?

HINT : 153 = 1*1*1 + 5*5*5 + 3*3*3 // 153 is an Armstrong number.

In [1]:
```
n = int(input())
s = n
b = len(str
        (n))
sum1 = 0
while n != 0:
    r = n % 10
    sum1 = sum1+(r**b)
    n = n//10
if s == sum1:
    print("The given number", s, "is armstrong number")
else:
    print("The given number", s, "is not armstrong number")
```

```
153
The given number 153 is armstrong number
```

2. 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.
```

In [2]:
```
n=int(input("Enter the number: "))
c=0
a=1
b=1
if n==0 or n==1:
    print("Yes")
else:
    while c<n:
        c=a+b
        b=a
        a=c
    if c==n:
        print("Yes")
    else:
        print("No")
```

```
Enter the number: 33
No
```