

1. Python Program to check Armstrong Number?

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

```
Solution: num=int(input('enter the number'))
print(num)
sum=0
temp=num
while temp>0:
    reminder=temp%10
    sum=sum+reminder3
    temp=temp//10
if num==sum:
    print(num,'Armstrong Number')
else
    print(num,'Not 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.

**Solution:** list=[ ]

```
t1=0
```

```
t2=1
```

```
list.append(t1)
```

```
list.append(t2)
```

```
num=int(input('enter the number'))
```

```
temp=num
```

```
for i in range(1,num):
```

```
    temp=list[i]+list[i-1]
```

```
    list.append(temp)
```

```
print(list)
```

```
for i in range(0,num):
```

```
    if num==list[i]:
```

```
        print(num,'is fibanocci number')
```

```
        break
```

```
    else:
```

```
        print(num,'is not fibanocci number')
```

```
        break
```