

1. Python program to check Armstrong Number?

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

Armstrong Number.

```
num = int(input("Enter a number: "))
```

```
sum = 0
```

```
n = len(str(num))
```

```
temp = num
```

```
while temp > 0:
```

```
    digit = temp % 10
```

```
    sum += digit ** n
```

```
    temp //= 10
```

```
if num == sum:
```

```
    print(num, "is an Armstrong number")
```

```
else:
```

```
    print(num, "is not an 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 n th term is sum of $(n-1)$ th and $(n-2)$ th term.

```
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")
```