

Assignment-1

① Python program to check Armstrong Number?

② Python program for this to check if a given number is fibonacci number?

Ans PROGRAM:

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

# initialize sum
sum = 0

# find the sum of the cube of each digit
temp = num
while temp > 0:
    digit = temp % 10
    sum += digit ** 3
    temp //= 10

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

OUTPUT:

Enter a number 663
663 is not an Armstrong Number

Enter number 153
153 is an Armstrong number

2ans

PROGRAM

```
nterms = int(input("How many terms?"))  
  
# first two terms  
n1, n2 = 0, 1  
count = 0  
  
# check if the number of terms is valid  
if nterms <= 0:  
    print("please enter a positive integer")  
  
# if there is only one term, return n1  
elif nterms == 1:  
    print("fibonacci sequence upto", nterms, ":")  
    print(n1)  
  
# generate fibonacci sequence  
else:  
    print("Fibonacci sequence :")  
    while count < nterms:  
        print(n1)  
        nth = n1 + n2  
        # update values  
        n1 = n2  
        n2 = nth  
        count += 1
```

OUTPUT :

How many terms ? 7

Fibonacci Sequence :

0

1

1

2

3

5

8