```
# Armstrong number - for assignment#1

num = int(input("Enter a number : "))
chknum = num # store user input
digit = len(str(num)) # ger the count of digits
sum = 0 # to add the sum of each of the number's to the power of
x = 0
while (num>0):
    n = num % 10
    #print(n) for testing code
    x = n ** digit
    #print(x) for testing code
    sum = sum + n**digit
    #print(sum) for testing code
    num = num//10

#print(sum) for testing code
#print(chknum)

if sum == chknum:
    print (chknum, ' is an Armstrong number')
else:
    print (chknum, ' is not an armstrong number')

--------------------------------------------------------------------------------

# Fibonacci sequence for assignment#1

numterms = int(input("Enter number of terms for Fibonacci seqence :"))

# first two terms are constant
num1, num2 = 0, 1
count = 0

# check if the user input of number of terms is valid
if numterms <= 0:
   print("Please enter a positive number")
# if there is only one term, return n1
elif numterms == 1:
   print("Fibonacci sequence upto",nterms,":")
   print(num1)
# generate fibonacci sequence numbers
else:
   print("Fibonacci sequence is:")
   while count < numterms:
```

```
print(num1)
fbnum = num1 + num2
# update values for next sequnce number
num1 = num2
num2 = fbnum
count += 1
```