#PALINDROME NUMBER

n=int(input("Enter the number: "))

m=n

sum=0

while(m>0):

sum=sum\*10+(m%10)

m=m//10

if(n==sum):

print("Palindrome!!")

else:

print("Not a palindrome")

#GCD

x=int(input("Enter the first number:"))

y=int(input("Enter the second number:"))

if x > y:

smaller = y

else:

smaller = x

for i in range(1, smaller+1):

if((x % i == 0) and (y % i == 0)):

gcd = i

print("GCD is: ",gcd)

#ARMSTRONG NUMBER

n = int(input("enter a number: "))

length = len(str(n))

sum = 0

m=n

print(length)

while(m != 0):

sum = sum + ((m % 10) \*\* length)

m = m // 10

if sum == n:

print("Armstrong number!!")

else:

print("Not an Armstrong number")

#PRINT PRIME NUMBERS

n=int(input("Enter the number: "))

for Number in range (1, n+1):

count = 0

for i in range(2, (Number//2 + 1)):

if(Number % i == 0):

count = count + 1

break

if (count == 0 and Number != 1):

print(Number, end = ' ')

#PATTERN

n=4

k = 2\*n - 2

p=1

for i in range(0, n):

for j in range(0, k):

print(end=" ")

k = k - 1

for j in range(0, i+1):

print(p," ", end="")

p=p+1

print("\n")

#FIBONACCI SERIES

a=0

b=1

n=int(input("enter the number of terms in fibonacci series: "))

print(a,b,end=" ")

for i in range(1,n-1):

c=a+b

a=b

b=c

print(c,end=" ")

output :

