#1.program to convert binary number to decimal  
num=list(input('enter a binary number:'))  
value=0  
for i in range(len(num)):  
    digit=num.pop()  
    if digit=='1':  
        value=value+pow(2,i)  
print('the decimal value of the number is:',value)

#2.program to print n fibonacci series  
n=int(input('enter n value:'))  
print('the fibonacci series is:')  
first=0  
second=1  
if n==1:  
    print('0')  
if n==2:  
    print('0')  
    print('1')  
else:  
    i=1  
    print('0')  
    print('1')      
    while i<=n-2:  
        next=first+second  
        print(next)  
        first=second  
        second=next  
        i=i+1

#3.program to print k multiplication table  
k=int(input('enter k value:'))  
for i in range(1,11):  
    print(k,'\*',i,'=',k\*i)

#4A.take ten integers from keyboard using loop and print their average valve  
add=0  
for i in range(1,11):  
    n=int(input('value is:'))  
    add=add+n  
print(add/10)

# 5.program to find GCD or HCF of given two numbers  
a=int(input('enter n value:'))  
b=int(input('enter n value:'))  
gcd=1  
i=1  
while i<=a and i<=b:  
    if a%i==0 and b%i==0:  
        gcd=i  
    i=i+1  
print(gcd)

#6.program to print the given word in reverse order  
word=str(input('enter the word:'))  
print('the reversed string is:',word[::-1])

#7.program to find no of even and odd numbers in given series  
even=0  
odd=0  
series=[1,2,3,4,5,6,7,8,9,10]  
for i in series:  
    if i%2==0:  
        even=even+1  
    else:  
        odd=odd+1  
print('even numbers in series:',even)  
print('odd numbers in series:',odd)

#8.program to print all the numbers from 0 to 6 except 3 and 6  
print('0')  
for i in range (0,7):  
    if i%3==0:  
        continue  
    else:  
        print(i)

#4B.program to print pattern

#   \*  
#   \* \*  
#   \* \* \*  
#   \* \* \* \*  
rows=4  
for i in range(0,rows):  
    for j in range(0,i+1):  
        print('\*',end='')  
    print('\r')