LAB 11

1.BINOMIAL COEFFIIENT

n=int(input())

c=[[0]\*n for \_ in range(n)]

for i in range(n):

for j in range(i+1):

if j==0 or j==i:

c[i][j]=1

elif j<i:

c[i][j]=c[i-1][j-1]+c[i-1][j]

else:

c[i][j]=0

print(c)

OUTPUT:

2.WORD WRAP

def w(t, m):

w = t.split()

n = len(w)

dp = [float('inf')] \* (n + 1)

dp[n] = 0

lc = [[float('inf')] \* n for \_ in range(n)]

for i in range(n):

l = -1

for j in range(i, n):

l += len(w[j]) + 1

if l <= m:

lc[i][j] = (m - l) \*\* 2 if j != n-1 else 0

else:

break

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

dp[i] = min((lc[i][j] + dp[j + 1] for j in range(i, n) if lc[i][j] != float('inf')), default=float('inf'))

result = []

i = 0

while i < n:

for j in range(i, n):

if lc[i][j] != float('inf') and dp[i] == lc[i][j] + dp[j + 1]:

result.append(' '.join(w[i:j + 1]))

i = j + 1

break

return result, lc

t =input("enter string: ")

m = int(input("Enter the max limit of charecters in a single line: "))

wl, lc = w(t, m)

for i in lc:

print(i)

for i in wl:

print(i)

OUTPUT:

