co2\_1: n=int(input("enter the number"))

f=1

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

f=f\*i

print("factorial of",n,"is",f)

output:

enter the number3

factorial of 3 is 6

co2\_3: list=[1,2,3,4,5,6,7,8,9,10]

total=sum(list)

print("sum of list=",total)

output:

sum of list= 55

co2\_5

rows=int(input("enter the number of rows"))

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

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

print(i\*j,end=" ")

print()

output:

enter the number of rows4

1

2 4

3 6 9

4 8 12 16

C02\_7:

str=input("enter a string")

print("inputed string is",str)

if str.endswith("ing"):

str=str+'ly'

else:

str=str+'ing'

print("the formated string is",str)

output:

enter a string playing

inputed string is playing

the formated string is playingly

co2\_2

n=int(input("enter the limit:"))

a=0

b=1

sum=0

count=0

print("fibinocci series:",end=" ")

while(count<=n):

print(sum,end=" ")

count+=1

a=b

b=sum

sum=a+b

output:

enter the limit:5

fibinocci series: 0 1 1 2 3 5

co2\_6

test\_str=str(input("enter the string"))

freq={}

for i in test\_str:

if i in freq:

freq[i]+=1

else:

freq[i]=1

print("count of all characters:"+str(freq))

output:

enter the string malayalam

count of all characters:{'m': 2, 'l': 2, 'y': 1, 'a': 4}

co2\_8

a=[]

n=int(input("enter the number of elements in the list"))

for x in range(0,n):

element=input("enter element"+str(x+1))

a.append(element)

max1=len(a[0])

temp=a[0]

for i in a:

if(len(i)>max1):

max1=len(i)

temp=i

print("longest word:",temp)

print("length of longest word",max1)

output

enter the number of elements in the list2

enter element1malayalam

enter element2maths

longest word: malayalam

length of longest word 9

co2\_9

n=int(input("enter the limit"))

for i in range(n):

for j in range(i):

print("\*",end=" ")

print()

for i in range(n,0,-1):

for j in range(i):

print("\* ",end="")

print(" ")

output:

enter the limit4

\*

\* \*

\* \* \*

\* \* \* \*

\* \* \*

\* \*

\*

Co2\_10:

def factors(x):

print("the factor of",x,"are:")

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

if(x%i==0):

print(i)

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

factors(n)

output:

enter a number:4

the factor of 4 are:

1

2

4

Co2\_11:

import math

t\_area=lambda b,h:1/2\*b\*h

r\_area=lambda l,b:l\*b

s\_area=lambda a:a\*a

print("area of triangle:",t\_area(10,20))

print("area of rectangle:",r\_area(4,5))

print("area of circle:",s\_area(4))

output:

area of triangle: 100.0

area of rectangle: 20

area of circle: 16

c02\_4:

from math import sqrt as s

for i in range(1000,10000):

if s(i)==int(s(i)) and i%2==0:

print(i,end=" ")

output:

1024 1156 1296 1444 1600 1764 1936 2116 2304 2500 2704 2916 3136 3364 3600 3844 4096 4356 4624 4900 5184 5476 5776 6084 6400 6724 7056 7396 7744 8100 8464 8836 9216 9604