**Python programming-CSA0814**

**DAY 2**

**(5 aug 24)**

**1.SUM OF SERIES**

X=int(input())

If x<1:

Print(“not a valid number”)

else:

t=0

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

t+=i\*\*2

print(“sum of squares from 1 to “,x,”is”,t)

**2.LCM AND GCD**

Import math

a=int(input())

b=int(input())

c=int(input())

gcdtwo=math.gcd(c,b)

gcdthree=math.gcd(gcdtwo,c)

lcmtwo=(a\*b)//gcd\_two

lcmthree=(lcmtwo\*c)//gcdthree

print(lcmthree)

print(gcdthree)

**3.FINDING THE LENGTH OF LAST WORDS**

Sen=input()

w=sen.split()

l=w[-1]

length=len(l)

print(length)

**4.PRINT ALL COMPOSITE NUMBERS BETWEEN TWO NUMBER**

a=1

b=10

for i in range(a,b+1):

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

if i%j==0:

c+=1

if c!=2 and c!=1:

print(I,end=””)

**5.FIND THE SQUARE,SQUAREROOT,CUBE,CUBEROOT OF A GIVEN NUMBER.**

Import numpie as p

A=float(input())

Print(“square”,a\*\*2)

Print(“cube”,a\*\*3)

Print(“squareroot”,p.sqrt(a))

Print(“cuberoot”,p.cbrt(a))

**6.COMBINATIONS OF NUMBERS**

import itertools

def printcombinations(n):

for r in range(1,len(n)+1)

comb=itertools.combinations(n,r)

for combo in combination:

print(combo)

n=[1,2,3]

print(printcombinations(numbers)

**7.PRINT ALL PRIME NUMBERS BETWEEN TWO GIVEN NUMBERS**

def prime(num)

return num>1 and all(num%i!=0)

for i in range(2,int(num\*\*0.5)+1)

def genprimenum(start,end):

primes=num for num in range(start,end):

if prime:

print(prime[0])

genprimenum(10,50)

**8.finding leap year or not**

Year=int(input())

If(year%4==0 and year%100!=0) or (year%400==0):

Print(“leap year”)

else:

print(“not a leap year”)

**9.FIND THE GIVEN INTEGER IN PALINDROME OR NOT**

Num=int(input())

onum=num

Reversed=0

While num>0:

Rem=rem%10

Reversed=reversed\*10+rem

Num//=10

If onum==reversed:

Print(“palindrome”)

else:

print(“not a palindrome”)

**10.FIND THE SQUARE OF ODD AND EVEN NUMBER IN A LIST**

def sumofsquare(number):

sumsquareodd=0

sumsquareeven=0

for num in number:

if num%2==0:

sumsquareeven+=num\*\*2

sumsquareodd+=num\*\*2

return sumsquareodd,sumsquareeven

numbers=[1,2,3,4,5,6,7,8,9,10]

print(sumofsquare(number))