Python programming:-

**1.Prime (or) Not :**

**Code:**

n=7

count=0

for I in range(2,n):

if a%i==0:

count+=1

if count>0:

print(“Prime”)

else:

print(“Not Prime”)

**Output: Prime**

**2.Palindrone (or)Not:**

**Code:**

n=”121”

if n==n[::-1]:

print(“Palindrone”)

else:

print(“Not Palindrone”)

**output:-Palindrone**

**3.Factorial:-**

n=5

f=1

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

f=f\*i

print(f)

**output:-120**

**4.Fibonacci:-**

A,b=0,1

n=6

for I in range(n):

print (a)

a,b=b,a+b

**0utput:-011235**

**5.Sum of digits in a number:-**

a=2005

sum=0

while a>0:

r=a%10

sum=sum+r

a=a//10

print(sum)

**output:-7**

**6.Table formate:-**

a=2

for I in range (1,11):

print(f”{i}\*2={i\*2}”)

**output:- 1\*2=2**

**2\*2=4**

**……..**

**10\*2=20**

**7.LCM and GCD :-**

a=3

b=6

c=[]

for i in range (1,b):

if a%i==0 and b%i==0:

c.append(i)

gcd=max(c)

lcm=(a\*b)//gcd

print(gcd,lcm)

**output:- 3,6**

**8.Prime number in range :-**

x=10

y=20

for n in range(x,y+1):

if n>1:

for I in range (2,n):

if(n%i==0):

break

else:

print(n)

**output:-11 13 17 19**

**9.Leap year:-**

n=2024

if(n%4==0 and n%100!==0 and n%400==0):

print(“Leap year”)

else:

print(“Not Leap year”)

**output:-Leap year**

**10.Tech Number (or) Not:-**

a=”3025”

b=len(a)

while b%2==0:

x=a[0:2]

y=a[2:4]

p=int(x)

q=int(y)

sum=p+q

tech=sum\*\*2

c=str(tech)

if c==a:

print(“Tech”)

else:

print(“Not tech”)

**output:-Tech**