**1.Prime number**

**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(“Palindrome”)

else:

print(“Not Palindrome”)

Output : Palindrome

**3.Factorial:**

**Code**

n=5

f=1

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

f=f\*i

print(f)

Output : 120

**4.Fibonacci**

**Code**

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**

**Code**

a=2005

sum=0

while a>0:

r=a%10

sum=sum+r

a=a//10

print(sum)

Output : 7

**6.Table format**

**Code**

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**

**Code**

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**

**Code**

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**

**Code**

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**

**Code**

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