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