

Python Programming

Day-1

1) Palindrome-

```
num="12321"
a=num[::-1]
if num==a:
    print("Palindrome")
else:
    print("Not a palindrome")
```

2) Prime or Not-

```
num=29
flag=True
if(num==1):
    print("Not a prime")
elif(num>1):
    for i in range(2,num):
        if(num%i==0):
            flag=False
            break
```

if flag:

print("prime number")

else:

print("Not a prime number")

3) Factorial-

num=5

fact=1

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

fact=fact*i

print(fact)

4) Fibonacci series-

num=10

t1=0

t2=1

print(t1,t2,end=" ")

for i in range(3,num+1):

nextTerm=t1+t2

t1=t2

t2=nextTerm

print(nextTerm,end=" ")

5) Sum-

```
n=1234
sum=0
while n!=0:
    sum=sum+n%10
    n//=10
print(sum)
```

6) Multiplication Table-

```
n=5
for i in range(1,6):
    print(n,"x",i,"=",n*i)
```

7) LCM and GCD-

```
a=3
b=12
num1=a
num2=b
while(num2!=0):
    rem=num1%num2
    num1=num2
    num2=rem
print("GCD",num1)
print("lcm",a*b//num1)
```

8) Prime number in given range-

a=3

while(a<15):

for i in range(2,a):

if(a%i==0):

break

if(i==a-1):

print(a)

a+=1

9) Leap Year or Not-

a=2024

if(a%4==0):

print("leap year")

else:

print("not a leap year")

10) Tech Number or Not-

num=3025

temp=num

tem=num

count=0

while temp!=0:

```
temp//=10
count+=1
if count%2==0:
    a=tem%100
    b=tem//100
    add=a+b
    sq=add*add
    if(sq==num):
        print("Tech number")
    else:
        print("Not a Tech number")
else:
    print("Not a Tech number")
```