**Python day 1**

**1. Program to find whether a number is palindrome or not**

num="12321"

a=num[::-1]

if num==a:

print("Palindrome")

else:

print("Not a palindrome")

**2. Program to check whether the number is 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. Program to find the factorial of a number**

num=5

fact=1

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

fact=fact\*i

print(fact)

**4. Program to find the 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. Program to find the sum of digits**

n=1234

sum=0

while n!=0:

sum=sum+n%10

n//=10

print(sum)

**6. Program to generate multiplication table**

n=5

for i in range(1,6):

print(n,"x",i,"=",n\*i)

**7. Program to find 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. Program to find the prime number in the 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. Program to check whether the year is leap year or not**

a=2024

if(a%4==0):

print("leap year")

else:

print("not a leap year")

10. **Program to find whether a number is 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")