1.PROGRAM TO PRINT THE GIVEN NUMBER IS PERFECT NUMBER OR NOT?

main.py

```
n=int(input("enter the number:"))
sum=0
for i in range(1,n):
    if(n%i==0):
        sum+=i
if(sum==n):
    print("perfect")
else:
    print("not perfect")
```

Output

```
enter the number:6
perfect

=== Code Execution Successful ===
```

2.PROGRAM TO CALCUATE THE GCD AND LCM OF TWO NUMBERS?

main.py

```
n1=int(input("enter the number:"))
n2=int(input("enter the number:"))
i=1
gcd=1
while(i<=n1):
    if(n1%i==0 and n2%i==0):
        gcd=i
    i+=1
print("gcd:",gcd)
print("lcm:",(n1*n2)//gcd)
```

Output

```
enter the number:15
enter the number:25
gcd: 5
lcm: 75

=== Code Execution Successful ===
```

3.PROGRAM TO FIND FACTORIAL OF THE GIVEN NUMBER WITHOUT RECURSION?

main.py

```
n=int(input("enter number:"))
fact=1
for i in range(1,n+1):
    fact=fact*i
print(fact)
```

Output

```
enter number:5
120

=== Code Execution Successful ===
```

4.FACTORIAL WITH RECURSION?

main.py

```
n = int(input("enter number:"))
def factorial(n):
    if n == 1:
        return n
    elif n == 0:
        return 1
    else:
        return n * factorial(n - 1)
print("factorial is", factorial(n))

```

Output

```
enter number:5
factorial is 120

=== Code Execution Successful ===
```