```python
n=int(input("enter an number:"))
count=0
for i in range (1,n+1):
    if(n%i==0):
        count+=1
if(count==2):
    print("is prime")
else:
    print("not prime")
```

```
enter an number:7
is prime

[Program finished]
```

```
##fibonacci Series
nterms = int(input("How many terms? "))
n1, n2 = 0, 1
count = 0
if nterms <= 0:
   print("Please enter a positive integer")
elif nterms == 1:
   print("Fibonacci sequence upto",nterms,
":")
   print(n1)
else:
   print("Fibonacci sequence:")
   while count < nterms:
      print(n1)
      nth = n1 + n2
      n1 = n2
      n2 = nth
      count += 1
```

```
How many terms? 6
Fibonacci sequence:
0
1
1
2
3
5

[Program finished]
```

```python
#factorial of a number
n = int(input('enter an number'))
factorial = 1
for i in range(1, n + 1):
    factorial *= i
print('Factorial of %d is %d' % (n,
factorial))
```

```
enter an number5
Factorial of 5 is 120

[Program finished]
```

```python
# Armstrong number or not


num = int(input("Enter a number: "))
sum = 0
temp = num
while temp > 0:
   digit = temp % 10
   sum += digit ** 3
   temp //= 10
if num == sum:
   print(num,"is an Armstrong number")
else:
   print(num,"is not an Armstrong
number")
```

```
Enter a number: 153
153 is an Armstrong number

[Program finished]
```

```python
##prime upto limit
n=int(input("enter an limit:"))
print("Prime upto", n, "are:")

for i in range(2, n + 1):

  if i > 1:
     for j in range(2, i):
        if (i % j== 0):
           break
     else:
        print(i)
```

```
enter an limit:6
Prime upto 6 are:
2
3
5

[Program finished]
```

```python
#perfect or not
n = int(input("Enter any number: "))
sum1 = 0
for i in range(1, n):
    if(n % i == 0):
        sum1 = sum1 + i
if (sum1 == n):
    print("The number is a Perfect number!")
else:
    print("The number is not a Perfect number!")
```

```
Enter any number: 27
The number is not a Perfect number!

[Program finished]
```