main.py

Run

```
lim=int(input("Enter the limit"))
for num in range(1, lim):
    if num > 1:
        for i in range(2, num):
            if (num % i) == 0:
                break
        else:
            print(num)
```

Shell

Clear

```
Enter the limit10
2
3
5
7
>
```

main.py

Run

```python
Number = int(input(" Please Enter any Number: "))
Sum = 0
for i in range(1, Number):
    if(Number % i == 0):
        Sum = Sum + i
if (Sum == Number):
    print(" %d is a Perfect Number" %Number)
else:
    print(" %d is not a Perfect Number" %Number)
```

Shell

Clear

```
Please Enter any Number: 6
6 is a Perfect Number
>
```

main.py

Run

```python
num=int(input("Enter a number"))
flag = False
if num > 1:
        for i in range(2, num):
         if (num % i) == 0:

                flag = True
                break
if flag:
    print(num, "is not a prime number")
else:
    print(num, "is a prime number")
```

Shell

Clear

```
Enter a number6
6 is not a prime number
>
```

main.py

Run

Shell

Clear

```python
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: 370
370 is an Armstrong number
>
```

main.py

Run

Shell

Clear

```python
num = int(input("Entert the limit"))

factorial = 1

if num < 0:
   print("Sorry, factorial does not exist for negative numbers")
elif num == 0:
   print("The factorial of 0 is 1")
else:
   for i in range(1,num + 1):
       factorial = factorial*i
   print("The factorial of",num,"is",factorial)
```

```
Entert the limit10
The factorial of 10 is 3628800
>
```

main.py

Run

Shell

Clear

```
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? 10
Fibonacci sequence:
0
1
1
2
3
5
8
13
21
34
>
```