

1. Program to find the factorial of a number (Please do not use built in factorial method)

```
def fact(n):  
    if n == 1 :  
        return 1  
    else:  
        return n*fact(n-1)  
  
n=int(input("Enter Limit : "))  
f=fact(n)  
print(f)
```

2. Generate Fibonacci series of N terms

```
n=int(input("Enter Limit : "))  
f=0  
s=1  
print (f)  
print(s)  
c=0  
while(c<n-2):  
    t=f+s  
    f=s  
    s=t  
    c=c+1  
    print(t)
```

3. Find the sum of all items in a list of numbers

```
s=input("Enter the list of numbers : ")  
list1=list(s.split(" "))  
print(list1)  
res=0  
i=0  
for i in list1:  
    res=res+int(i)  
print(res)
```

4. Count the no. of vowels in an input text.

```
s=input("Enter a String : ")
list1=list(s)
count=0
for i in list1:
    if i=='a' or i=='e' or i=='i' or i=='u' or i=='o' :
        count+=1
    elif i=='A' or i=='E' or i=='I' or i=='U' or i=='O' :
        count+=1
print(count)
```

5. Generate a list of four digit numbers in a given range with all their digits even and the number is a perfect square.

Hint : In range (1000,10000)

4624 6084 6400 8464

```
import math

for i in range(1000,10000):
    val=True
    n=int(i)
    while(n>0):
        a=int(n%10)
        n=n/10
        if a%2!=0:
            val=False
            break
    if(val):
        root=math.sqrt(i)
        if int(root + 0.5) ** 2 == i:
            print(i)
```

6. Display the given pyramid with step number accepted from user.

Eg: N=4

```
1
2 4
3 6 9
4 8 12 16
```

```
n=int(input("Enter Limit : "))
for i in range(1,n+1):
    for j in range(1,i+1):
        print(i*j,end=' ')
    print()
```

7. Accept a name and print in reverse order.

Eg: Input – Sonia Abraham

Output – Abraham Sonia

```
s=input("Enter Name : ")
name_list=s.split(" ")
name_list.reverse()
for name in name_list:
    print (name,end=' ')
```

8. Concatenate all elements in a list entered and return a string.

Eg : l = [1,2,3,4,5]

Result – 12345

```
list1=[1,2,3,4,5]
for i in list1:
    print(i,end='')
```