1.factorial

x=int(input("enter the num"))

if(x>0):

fact=1

i=1

while(i<=x):

fact=fact\*i

i+=1

print(fact)

else:

print("\ninvalid")

print("\n")

2.leap year

a=int(input("\nEnter the year\t"))

if(a%4==0 & a%400==0):

if(a%100==0):

print("\nLeap year")

elif(a%100!=0):

print("\nLeap Year")

else:

print("\nNot LY")

else:

print("\nNot Leap Year")

3. sum of all items

total = 0

list1 = [11, 5, 17, 18, 23]

for ele in range(0, len(list1)): total = total + list1[ele]

print("Sum of all elements in given list: ", total)

4. even perfect square

def squareSum(n):

sum = 0

for i in range (0, n + 1):

sum += (2 \* i) \* (2 \* i)

return sum

ans = squareSum(n)

print (ans)

5. Pyramid

def contnum(n):

num = 1

for i in range(0, n):

num = 1

for j in range(0, i+1):

print(num, end=" ")

num = num + 1

print("\r")

n = 5

contnum(n)