1. year=int(input(“Enter year: "))

```
if year % 4 == 0:

 print("{} is a leap year".format(year))

else:
    print("{} is not a leap year”.format(year))
```

2.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 mnumber")
else:

    print(num, "is not an armstrong number”)
```

3. def TowerOfHanoi(n , source, destination, auxiliary):

```
    if n==1:
        print "Move disk 1 from source",source,"to
destination",destination
        return
    TowerOfHanoi(n-1, source, auxiliary, destination)
    print "Move disk",n,"from source",source,"to
destination",destination
```

```
    TowerOfHanoi(n-1, auxiliary, destination, source)

n = 4
TowerOfHanoi(n,'A','B','C') x = 10


4.
x = 10
y = 5


x = x * y

y = x // y;

x = x // y;

print("After Swapping: x =",
             x, " y =", y);



5.
num1 = int(input('Enter First number: '))
num2 = int(input('Enter Second number '))
add = num1 + num2
dif = num1 - num2
mul = num1 * num2
div = num1 / num2
floor_div = num1 // num2
power = num1 ** num2
modulus = num1 % num2
print('Sum of ',num1 ,'and' ,num2 ,'is :',add)
print('Difference of ',num1 ,'and' ,num2 ,'is :',dif)
print('Product of' ,num1 ,'and' ,num2 ,'is :',mul)
print('Division of ',num1 ,'and' ,num2 ,'is :',div)
print('Floor Division of
',num1 ,'and' ,num2 ,'is :',floor_div)
print('Exponent of ',num1 ,'and' ,num2 ,'is :',power)
print('Modulus of ',num1 ,'and' ,num2 ,'is :',modulus)
```