**1.Program to print Friendly number.**

def divisor\_sum(n):

total = 0

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

if n % i == 0:

total += i

return total

num1 = int(input("Enter first number: "))

num2 = int(input("Enter second number: "))

ratio1 = divisor\_sum(num1) / num1

ratio2 = divisor\_sum(num2) / num2

if ratio1 == ratio2:

print(num1, "and", num2, "are Friendly Numbers")

else:

print(num1, "and", num2, "are Not Friendly Numbers")

**output:**

Enter first number: 6

Enter second number:28

6 and 28 are Friendly Numbers

**2.program to print Adundant number.**

num = int(input("Enter a number: "))

div\_sum = 0

for i in range(1, num):

if num % i == 0:

div\_sum += i

if div\_sum > num:

print(num, "is an Abundant Number")

else:

print(num, "is not an Abundant Number")

**output:** Enter a number: 12

12 is an Abundant Number

**3.Program to print Strong number.**

import math

num = int(input("Enter a number: "))

temp = num

sum\_of\_fact = 0

while temp > 0:

digit = temp % 10

sum\_of\_fact += math.factorial(digit)

temp //= 10

if sum\_of\_fact == num:

print(num, "is a Strong Number")

else:

print(num, "is not a Strong Number")

**output:** Enter a number: 145

145 is a strong number

**4.Program to print Automorphic number.**

num = int(input("Enter a number: "))

square = num \* num

if str(square).endswith(str(num)):

print(num, "is an Automorphic Number")

else:

print(num, "is not an Automorphic Number")

**output:** Enter a number:5

5 is a Automorphic Number