Find the LCM and GCD of n numbers

Sample Input:

N value = 2

Number 1 = 16

Number 2 = 20

Sample Output: LCM = 80 GCD = 4

CODE:

import math

def find\_lcm(a, b):

return abs(a \* b) // math.gcd(a, b)

def find\_gcd(a, b):

return math.gcd(a, b)

def find\_lcm\_gcd\_of\_n\_numbers(n, numbers):

lcm\_result = numbers[0]

gcd\_result = numbers[0]

for i in range(1, n):

lcm\_result = find\_lcm(lcm\_result, numbers[i])

gcd\_result = find\_gcd(gcd\_result, numbers[i])

return lcm\_result, gcd\_result

# Get input from the user

n = int(input("Enter the value of N: "))

numbers = []

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

num = int(input(f"Enter Number {i}: "))

numbers.append(num)

# Find LCM and GCD

lcm, gcd = find\_lcm\_gcd\_of\_n\_numbers(n, numbers)

# Display the result

print(f"LCM = {lcm} GCD = {gcd}")

OUTPUT:

Enter the value of N: 2

Enter Number 1: 16

Enter Number 2: 20

LCM = 80 GCD = 4

>