3.write a program to find the gcd of two numbers using recursion factrozation
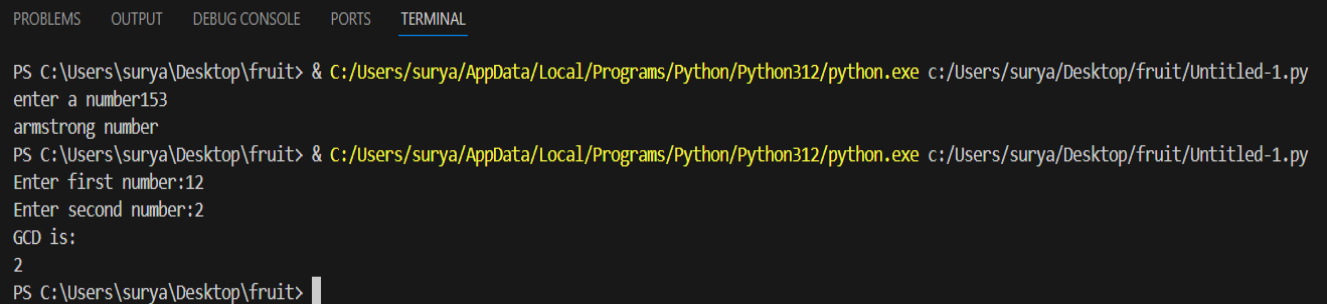
PROGRAM:

def gcd(a,b):

   if(b==0):

      return a

   else:

      return gcd(b,a%b)

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

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

GCD=gcd(a,b)

print("GCD is: ")

print(GCD)

TIME COMPLEXITY: O(n)

INPUT:12,2

OUTPUT:

```
PROBLEMS    OUTPUT    DEBUG CONSOLE    PORTS    TERMINAL

PS C:\Users\surya\Desktop\fruit> & C:/Users/surya/AppData/Local/Programs/Python/Python312/python.exe c:/Users/surya/Desktop/fruit/Untitled-1.py
enter a number153
armstrong number
PS C:\Users\surya\Desktop\fruit> & C:/Users/surya/AppData/Local/Programs/Python/Python312/python.exe c:/Users/surya/Desktop/fruit/Untitled-1.py
Enter first number:12
Enter second number:2
GCD is:
2
PS C:\Users\surya\Desktop\fruit>
```