CSA0670-Design and Analysis of Algorithms for Tractability Problems.

3. Write a program to find the GCD of two numbers using recursive factorization

Program:

```python
def gcd(a, b):
    if b == 0:
        return a
    else:
        return gcd(b, a % b)

num1 = 48
num2 = 18
result = gcd(num1, num2)
print(f"The GCD of {num1} and {num2} is {result}")
```

Output:

The GCD OF 48 and 18 is 6

Time Complexity: O(log(min(a,b)))