

❖GCD:

Explanation: -

The Greatest Common Divisor (GCD) of two integers is the largest positive integer that divides both numbers without leaving a remainder. It is commonly calculated using the Euclidean algorithm, which involves repeated division and remainder calculations. The GCD is useful in simplifying fractions, finding least common multiples, and solving problems in number theory.

Time Complexity: - $O(\log(\min(a,b)))$

Space Complexity: - $O(\log(\min(a,b)))$

```
[Start]
|
[Input a]
|
[Input b]
|
[Is b == 0?]
|      |
[Yes]   [No]
|       |
[Output
"GCD is:
" + a]
|       |
[End]   [gcdResult = gcd(b, a % b)]
|
[Output "GCD is: " + gcdResult]
|
[End]
```