

## DAY 46

### Interview Bit :

#### 1. Largest Coprime Divisor

You are given two positive numbers A and B. You need to find the maximum valued integer X such that:

X divides A i.e.  $A \% X = 0$

X and B are co-prime i.e.  $\text{gcd}(X, B) = 1$

For example,

A = 30

B = 12

We return

X = 5

CODE :

JAVA

```
public class Solution {
    public int cpFact(int A, int B) {
        while (gcd(A,B) != 1) {
            A = A/gcd(A,B);
        }
        return A;
    }
    public int gcd(int A, int B) {
        if (B == 0) {
            return A;
        } else {
            return gcd(B, A%B);
        }
    }
}
```