

## Task 2: Unique Elements Identification

Given an array of integers where every element appears twice except for two, write a function that efficiently finds these two non-repeating elements using bitwise XOR operations.

```
public class FindNonRepeatingElements {

    public static void findNonRepeating(int[] arr) {
        int xor=0;
        for(int num: arr) {
            xor^=num;
        }//for
        int setBit=xor&-xor;
        int x=0,y=0;

        for(int num: arr) {
            if((num&setBit)==0) {
                x^=num;
            }else {
                y^=num;
            }//else
        }
        System.out.println("Two non repeating elements are : "+x+
            " and "+y);
    }//fun

    public static void main(String[] args) {
        int[] arr= {4,1,2,1,2,3,4,5};
        findNonRepeating(arr);

    }//main

}//class
```