# Algorithms & Data Structures

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# Assignment04
**Due Sun 7ᵗʰ Nov 08:00 AM**

## 1  Problem 1

Write Java Program for Binary Search using Recursive and Iterative methods?

## 2  Problem 2

Write Java program to find Fibonacci Sequence using iterative and recursive solutions?

## 3  Problem 3

Consider the following GCD code, rewrite it using recursive solutions?

Listing 1: GCD

```java
public static int gcd(int a, int b){
        int r=0;
        while(b!=0)
        {
                r=a%b;
                a=b;
                b=r;
```

```
        }
        return a;
}
```