

# Engineering Animuthyam

## Java DSA – Course. Part - 53

### Binary Search

Course Link:

<https://www.youtube.com/playlist?list=PLjzLBp9HHZWWhVXBSPS1VqxXXDoVk07gd9>

Website Link:

<https://www.vigneshreddyjulakanti.in/>

Hello machas, Bagunnara

#### 1552. Magnetic Force Between Two Balls

<https://leetcode.com/problems/magnetic-force-between-two-balls/description/>

```

class Solution {
    public boolean isPossible(int[] position,int m,int k){
        int prev = -k;
        for(int i =0;i< position.length;i++){
            if(position[i] >= prev + k){
                prev = position[i];
                m-=1;
            }

            if(m<=0){
                return true;
            }
        }
        return false;
    }

    public int maxDistance(int[] position, int m) {
        Arrays.sort(position);
        int l = 1;
        int r = (int)Math.pow(10,9);
        while(l<=r){
            int mid = l + (r-l)/2;
            if(isPossible(position,m,mid)){
                l = mid + 1;
            }else{
                r = mid - 1;
            }
        }
        return r;
    }
}

```