Question Last Occurance of that value

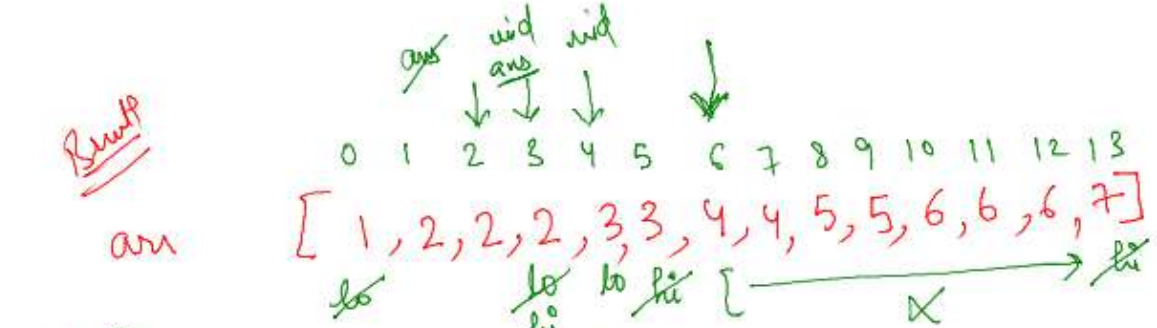
arr = [1 2 2 2 3 3 4 4 5 5 6 6 6 6 7]
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

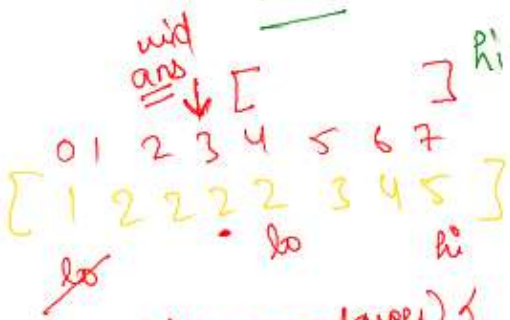
x = 2, last Occurence

Result

arr

x = 2





2 → last index

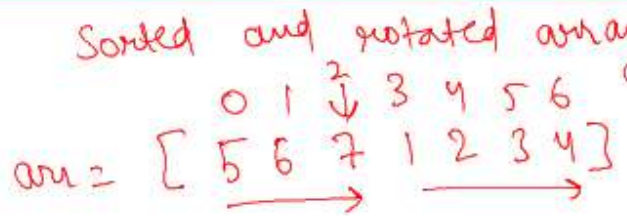
```
if(arr == target){

else if(arr[mid] < target){

else{

}
```

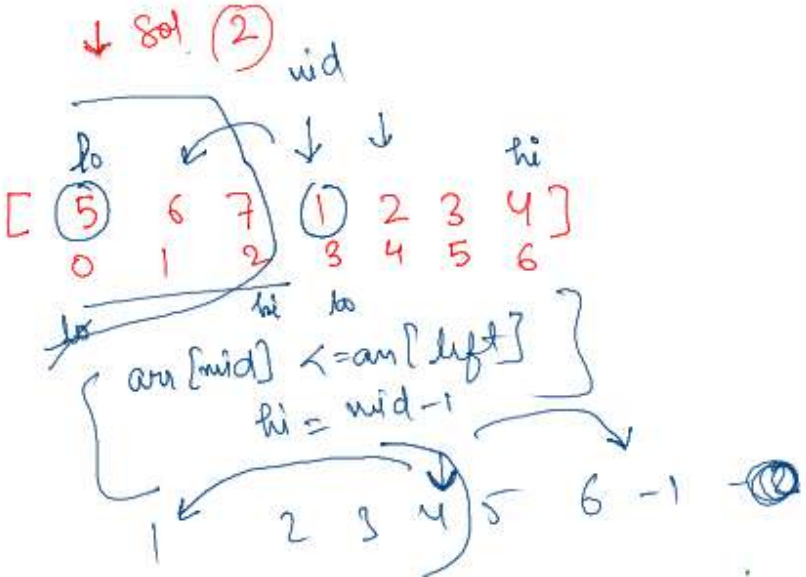
target = 1

```java
public static void main(String[] args) {
    Scanner scn = new Scanner(System.in);
    int n = scn.nextInt();
    int[] arr= new int[n];
    for(int i=0;i<arr.length;i++){
        arr[i]= scn.nextInt();
    }
    int target = scn.nextInt();
    int lo = 0;
    int hi = arr.length-1;
    int ans =-1;
    while(lo<=hi){
        int mid = (lo+hi)/2;

        if(arr[mid]==target){
            ans = mid;
            lo =  mid+1;
        }else if(arr[mid]<target){
            lo = mid+1;
        }else{
            hi = mid-1;
        }
    }

    System.out.println(ans);
    /* Enter your code here. Read input from STDIN. Print outpu
}
```

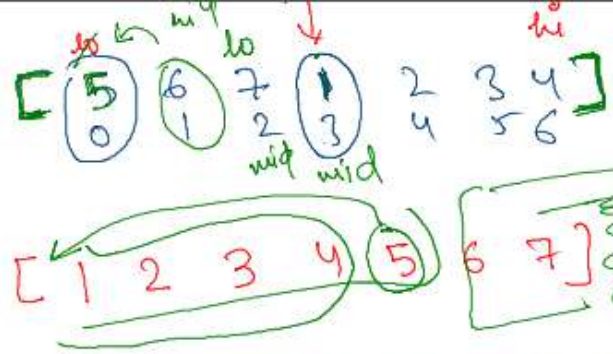
Question

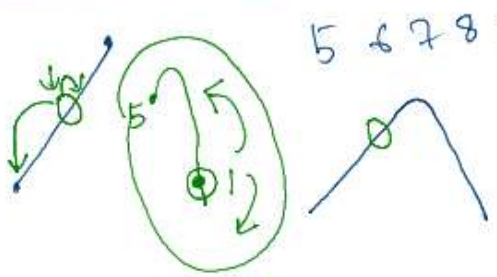
Sorted and rotated array

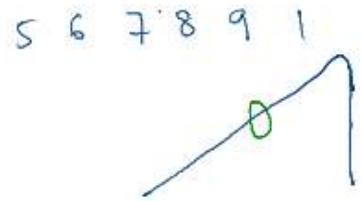


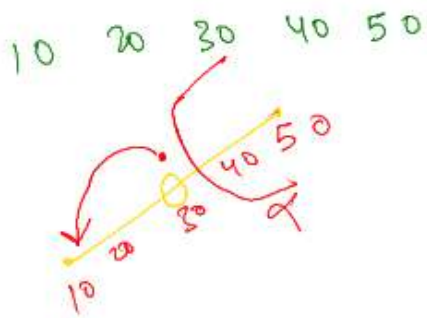


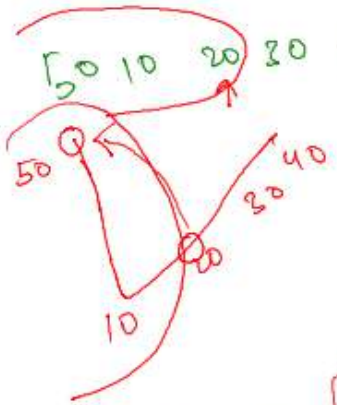
```java
public static void main(String[] args) {
    Scanner scn = new Scanner(System.in);
    int n = scn.nextInt();
    int[] arr= new int[n];
    for(int i=0;i<arr.length;i++){
        arr[i]= scn.nextInt();
    }

    int lo= 0;
    int hi = arr.length-1;

    while(lo<=hi){
        int mid = (lo+hi)/2;

        if(arr[mid]>arr[mid+1]){
            System.out.println(mid);
            return;
        }else if(arr[mid]<arr[lo]){
            hi =mid;
        }else{
            lo = mid+1;
        }
    }

    System.out.println("-1");
    /* Enter your code here. Read input from STDIN. Print output
}
```

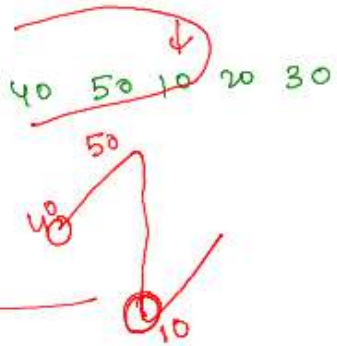


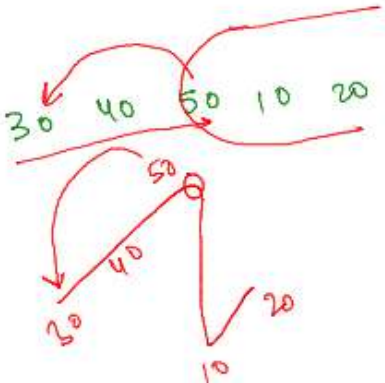


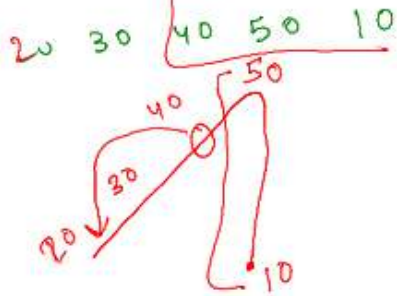






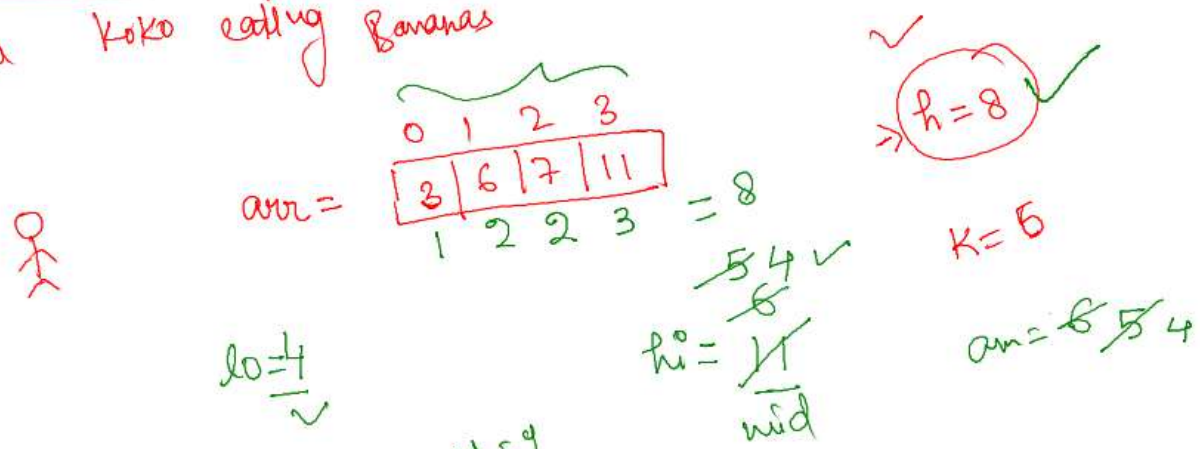


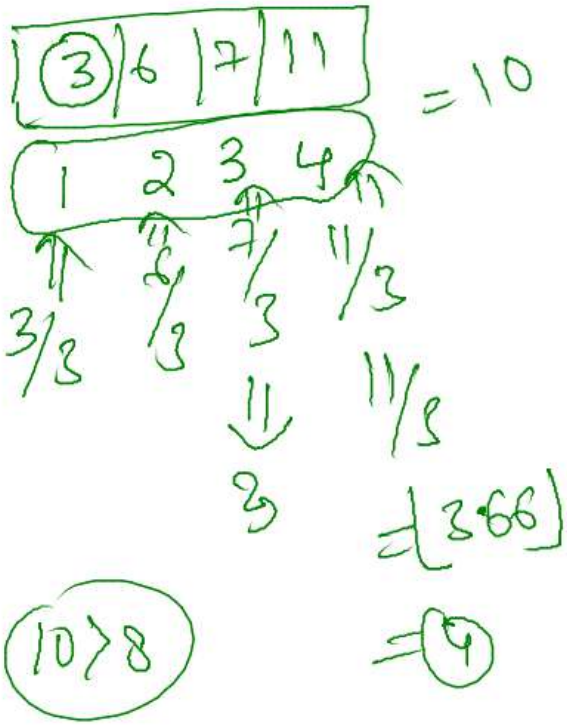




K=3

Qun Koko eating Bananas






```
public static boolean ifPossible(int[] arr, int h, int k){

    int hours =0;

    for(int i=0;i<arr.length;i++){
        hours += (arr[i]+k-1)/k;
        if(hours>h){
            return false;
        }
    }
    return true;
}
```