**Code Binary Search**

public class Solution {

public static int binarySearch(int[] arr, int x) {

int temp = -1,start=0,end=arr.length-1;

while (start <= end) {

int mid = (start + end) / 2;

if (arr[mid] < x) {

start = mid + 1;

} else if (arr[mid] == x) {

temp = mid;

break;

} else {

end = mid - 1;

}

}

if (start > end)

{ temp = -1;}

return temp;

}

}