

```

1  /**
2   * @author (Yaw Abaaho)
3   * @version (1/26/20)
4   */
5  public class p2
6  {
7      //Recursive binary search
8      //Assuming the input is sorted
9      int bcount=0;
10     public int recbin(int[] list,int n,int low,int high)
11     {
12         int middle=(low+high)/2;
13         if (list[middle]==n)
14         {
15             System.out.println("The total # of recursive calls is "+bcount);
16             return middle;
17         }
18         else if (low>high)
19             return -1;
20         else if (list[middle]<n)
21         {
22             bcount++;
23             return recbin(list,n,middle+1,high);
24         }
25         else
26         {
27             bcount++;
28             return recbin(list,n,low,middle-1);
29         }
30     }
31
32     //Recursive n factorial
33     int fcount=0;
34     public int recfact(int n)
35     {
36         if(n==0)
37         {
38             System.out.println("The total # of recursive calls is "+fcount);
39             return 1;
40         }
41         else
42         {
43             fcount++;/* recursive function is called
44             return n*recfact(n-1);
45         }
46     }
47
48     //Recursive fibonacci sequence for n>1
49     public int recfib(int n)
50     {
51         if(n==0)
52             return 0;
53         else if(n==1)
54             return 1;
55         else
56             return recfib(n-1)+recfib(n-2);
57     }
58 }

```