

```

1 function bsearch(t,want,firstp, lo,mid,hi,out)
2   out, lo, hi = 1, lo or 1, #t
3   while lo <= hi do
4     mid = (lo + hi)//2;
5     if want == t[mid] then
6       out = mid
7       if firstp then hi=mid-1 else lo=mid+1 end
8     else
9       if want < t[mid] then hi=mid-1 else lo=mid+1 end end end
10    return out end
11
12 local key,t = 20,{10,20,20,20,40,50}
13
14 lo = bsearch(t,key,true)
15 hi = bsearch(t,key,false,lo)
16 print(lo,hi)

```