```
BinarySearch(A[0..N-1], X) {
   low = 0
   high = N -1
  while (low \leq high) {
       mid = (low + high) / 2
       if (A[mid] > X)
           high = mid -1
       else if (A[mid] <X)
           low = mid + 1
       else
           return mid // found
   return -1 // not found
Unn Fig. 6-8.
```