Simply do a binary search to find an element equal to k. Then step back through the array until you reach the first element equal to k. Finally, step forward through the area adding each element to the iterator until you reach the first element that is not equal to k. This takes $O(\log n)$ time for the search and then at most s time to search back to the beginning of the run of k's and s time return all of the elements k. Therefore we have a solution running in at most $O(\log n + s)$ time.