class Solution {

public:

int search(vector<int>& a, int k) {

int low = 0, high = a.size() - 1, mid;

while(low <= high){

mid = (low + high) / 2;

if(a[mid] == k)return mid;

else if(a[mid] > k)high = mid - 1;

else low = mid + 1;

}

return -1;

}

};