

#15 Days of Coding Challenge

#Day 5

Binary Search

#Leetcode 704

Solution:

```
class Solution {
public:
    int search(vector<int>& nums, int target) {
        int mid, st=0, end = nums.size()-1;

        while(st<=end)
        {
            mid = st + (end - st)/2;

            if(nums[mid]==target) return mid;
            else if(nums[mid]>target) end = mid-1;
            else st = mid +1;
        }
        return -1;
    }
};
```

Time Complexity: $O(\log n)$

Space Complexity: $O(1)$