

Binary Search

```
class Solution {
public:
    int search(vector<int> nums, int target,int index = 0) {

        int mid = (nums.size()-1)/2;

        if (nums.size() == 1 && nums[mid] != target) return -1;

        if (nums[mid] == target) return mid+index;

        if (nums[mid] > target) return search(vector<int>(nums.begin(),
nums.end() - mid - 1),target,index+0);

        if (nums[mid] < target) return search(vector<int>(nums.begin() +
mid + 1, nums.end()),target,index+mid+1);

        return -1;
    }
};
```