

```
//classic binarySearch -----1-----
function binarySearchIterative(arr, target) : number { Show usages
    let left : number = 0;
    let right : number = arr.length - 1;

    while (left <= right) {
        const mid : number = Math.floor(x: (left + right) / 2);

        if (arr[mid] === target) return mid;
        else if (arr[mid] < target) left = mid + 1;
        else right = mid - 1;
    }

    return -1;
}

const nums : number[] = [1, 3, 5, 7, 9, 11, 13];
const target1 : number = 9;
const result1 : number = binarySearchIterative(nums, target1);
console.log(result1); // Выведет: 4
```

```
// Рекурсивный бинарный поиск -----2-----
function binarySearchRecursive(arr, target, left : number = 0, Show usages
    right : number = arr.length - 1) : number | any {

    if (left > right) return -1;

    const mid : number = Math.floor(x: (left + right) / 2);

    if (arr[mid] === target) return mid;
    if (arr[mid] < target)
        return binarySearchRecursive(arr, target, left: mid + 1, right);
    else
        return binarySearchRecursive(arr, target, left, right: mid - 1);
}
```

```
// Вызов функции
const array2 : number[] = [1, 3, 5, 7, 9, 11];
const target2 : number = 7;
const result2 = binarySearchRecursive(array2, target2);
```