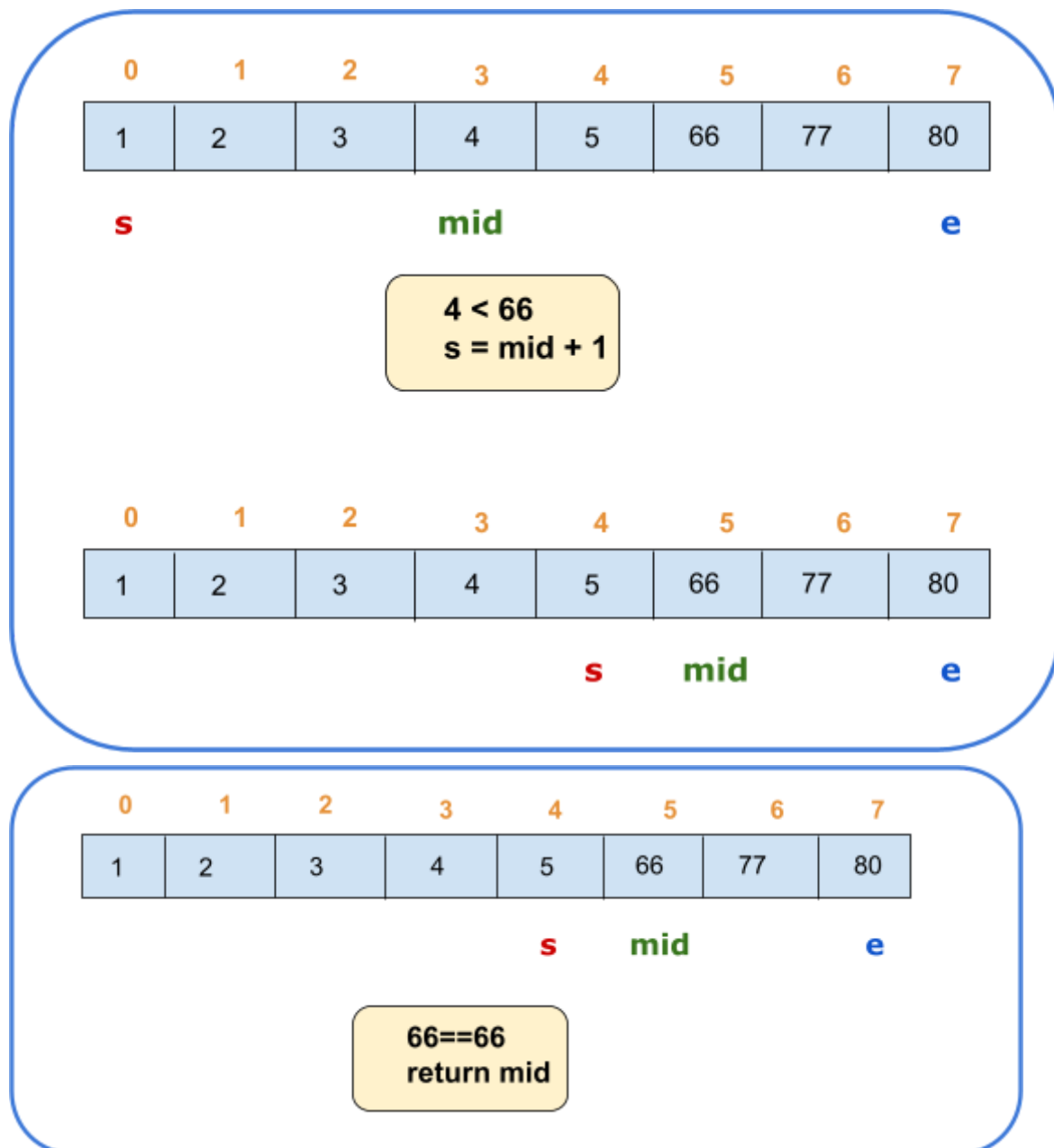


Binary Search

To perform binary search, the array should be sorted.

```
int[] arr = {1,2,3,4,5,66,77,80};  
System.out.println(binarySearch(arr,66));
```



```
public static int binarySearch(int[] a, int x){
    int s = 0;
    int e = a.length;
    while (s<=e) {
        int mid = (s+e)/2;

        if (a[mid]>x) {
            e = mid - 1;

        }else if (a[mid]<x) {
            s = mid + 1;
        }else{
            return mid;
        }

    }

    return -1;
}

public static void main(String[] args) {
    int[] arr = {1,2,3,4,5,66,77,80};
    System.out.println(binarySearch(arr,66));

    //output: 5
}
```