

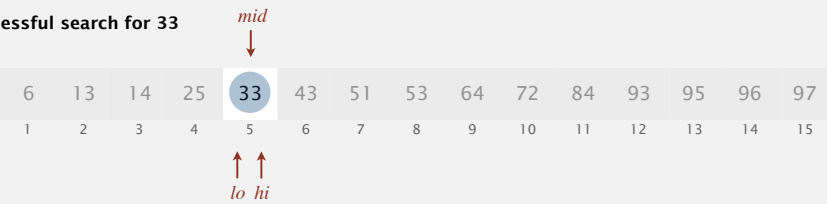
Binary search demo

Goal. Given a sorted array and a key, find index of the key in the array?

Binary search. Compare key against middle entry.

- Too small, go left.
- Too big, go right.
- Equal, found.

successful search for 33



return 5

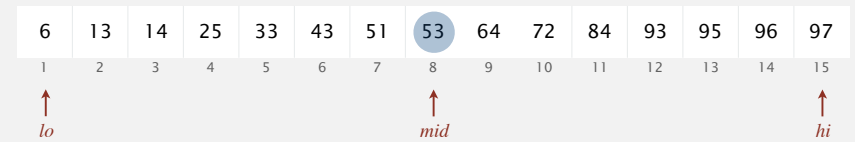
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unsuccessful search for 34



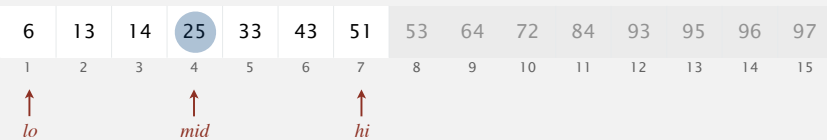
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unsuccessful search for 34



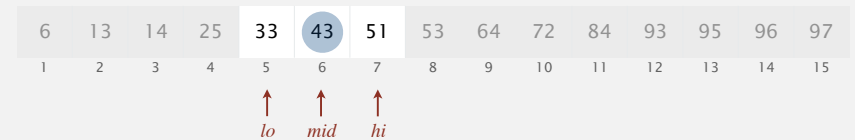
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unsuccessful search for 34

6	13	14	25	33	43	51	53	64	72	84	93	95	96	97
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

mid
↓
lo hi
↑ ↑

return -1