

list

0	1	2	3	4	5	6	7
7	10	12	14	16	20	29	37

Linear search

search 14



list

0	1	2	3	4	5	6	7
7	10	12	14	16	20	29	37



list

0	1	2	3	4	5	6	7
7	10	12	14	16	20	29	37



list

0	1	2	3	4	5	6	7
7	10	12	14	16	20	29	37



list

0	1	2	3	4	5	6	7
7	10	12	14	16	20	29	37

4 times

search 29



list							
0	1	2	3	4	5	6	7
7	10	12	14	16	20	29	37



list							
0	1	2	3	4	5	6	7
7	10	12	14	16	20	29	37



list							
0	1	2	3	4	5	6	7
7	10	12	14	16	20	29	37



list							
0	1	2	3	4	5	6	7
7	10	12	14	16	20	29	37



list							
0	1	2	3	4	5	6	7
7	10	12	14	16	20	29	37



list							
0	1	2	3	4	5	6	7
7	10	12	14	16	20	29	37



list							
0	1	2	3	4	5	6	7
7	10	12	14	16	20	29	37

7 times

binary search.

search (14)

mid = index // 2



1 times

list							
0	1	2	3	4	5	6	7
7	10	12	14	16	20	29	37

search (29)



$29 < 14$

list							
0	1	2	3	4	5	6	7
7	10	12	14	16	20	29	37



$29 < 20$

list							
0	1	2	3	4	5	6	7
7	10	12	14	16	20	29	37



3 times

list							
0	1	2	3	4	5	6	7
7	10	12	14	16	20	29	37