1. Sorted array - [1/2/3/4]

Key 3\_ printed in the apple and mothers  $\frac{i=0 \text{ to } \frac{n}{2}}{\mathbb{C}} \xrightarrow{n} \frac{n}{2}$  $\rightarrow \frac{n}{2^{\kappa}} = 1$ Sylin ofgans sail 2 z > K = log n. inch likered sixty

2. Space complexity of the iterative version of binary seanch. binary search - 0(1) signed smit stumes of

void constraints have

Horse values 4. in from 1 to n inner { j from 1 ton} time complexity  $\rightarrow 0(n^2)$ space complexity  $\rightarrow 0(1) \rightarrow no$  extraspace.

for i=1 ton

tim complexity -> o(n)
space complexity -> o(1) i=1 ton n, time complexity  $\rightarrow \sigma(n)$ 

space complexity -> O(1) 6. 召.

complaint of the supering space that program 7. graph of Studies A. M. P. Maley State State of

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- time complexity  $\rightarrow 0(n)$ Space complexity  $\rightarrow 0(1)$
- time complexity  $\rightarrow 0 (mlogn)$ Space complexity  $\rightarrow 0 (1)$
- 11. Time complexity -> o(n) Space complexity -> 0(1)
- 12.
- 13. Time complexity -> 0(n2)
  Space complexity -> 0(1)
- 14. Time complexity -> 0 (logn)

  Space complexity -> 0(1)
- 15. Time complexity → 0(n) Space complexity → 0(1)
- 16. Time complexity -> 0(2n)/0(n) space complexity -> 0(1)
- 17. Time complexity -> 0(1) Space complexity -> 0(1)
- 18. Time complexity -> 0(113) Space complexity -> O(1)

Time complexity - 0(13) Space complexity - 0(1) 20. o(1) or - Miscolamins sum 21. Time complexity → 00th Space complexity → 0(1) (4)0 - Windshipping south 22. Time compressity -> 0(n2) (1)0 (- 1) significant s 23. Time complexity  $\rightarrow 000$   $0(n^2)$   $\leftarrow 1300019000$ Space  $(1) \rightarrow 0(1)$ 24. Time complexity  $\rightarrow 0(log n)$ Space 1,  $\rightarrow 0(1)$ Luce complexiff > 0(0) = 25. Time complexity - 0(n2) Space complexity -> 0(1) 26. Time complexity → O(17)
Space 11 → O(17) some complexity -> 0 (1) 27. time complexity -> 0(n2) time complexity is 0(11) (12) 28. Time complexity →0(1)2)
Space "

Space " complexity - 1 0(27) Cilo & Privardans complexity—20(1) 29. 30. Time complexity → 0(n2)

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