Data Structures

Searching Technique – Binary Search

CODE FORTHINGS

Algorithm - Binary Search Recursive

Algorithm

Binary_search_recursive(arr, key,low,high)

Input Specification:

arr	:	Array to hold the elements
key	:	Item to be searched
low	:	Index Variable to indicate starting point
high	:	Index Variable to indicate ending point

Output Specification:

mid	:	Positon of key element
-1	:	Key is not found

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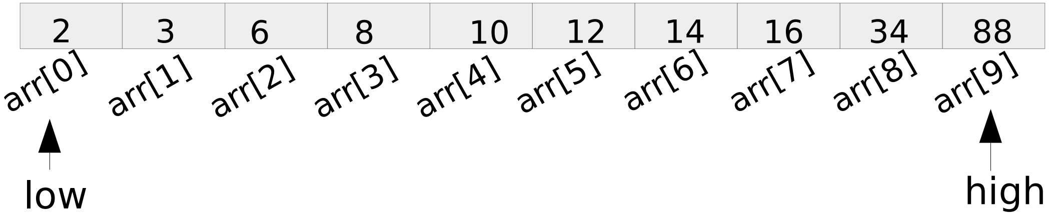

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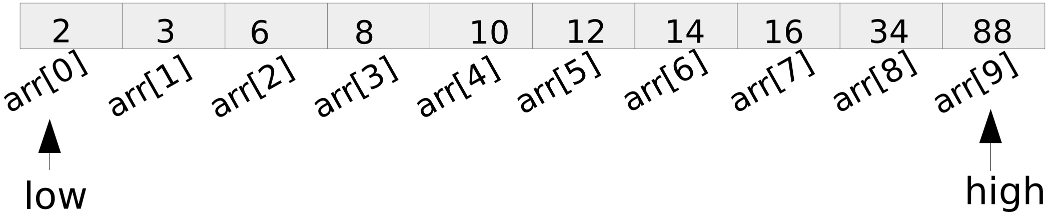

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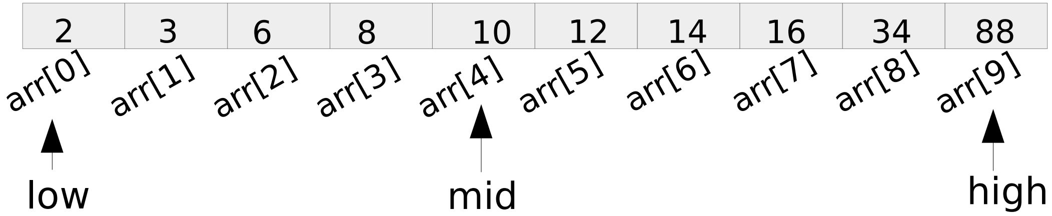

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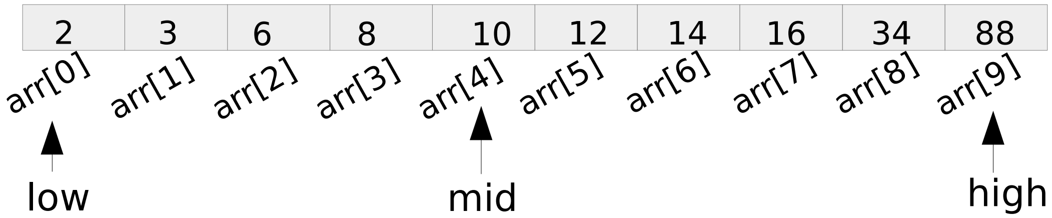

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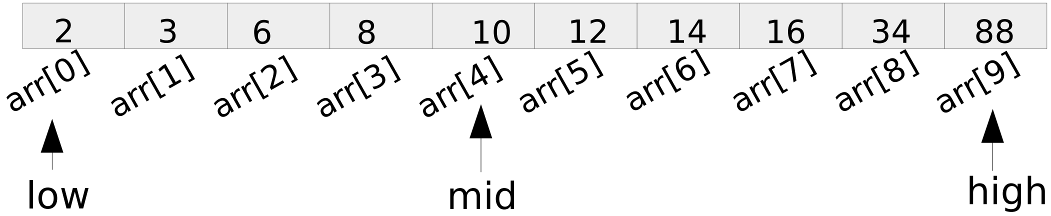

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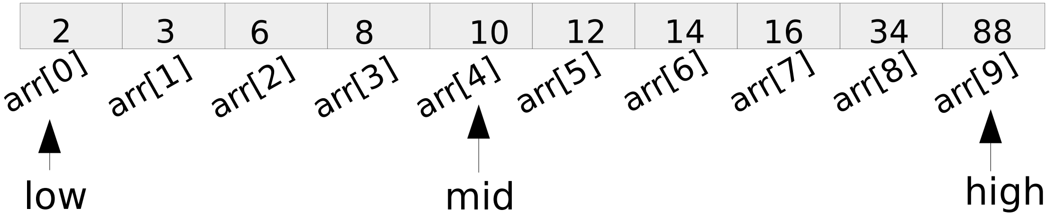

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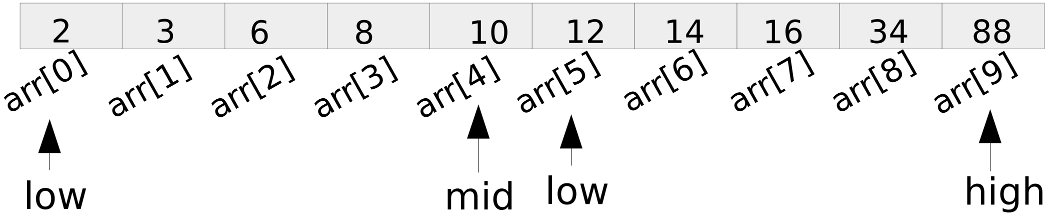

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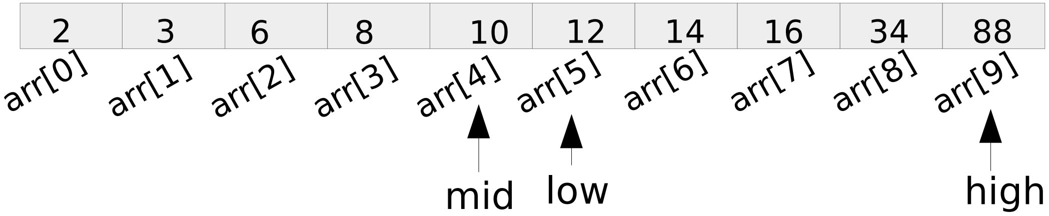

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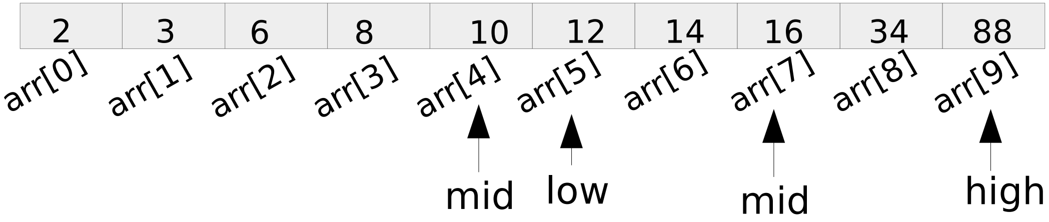

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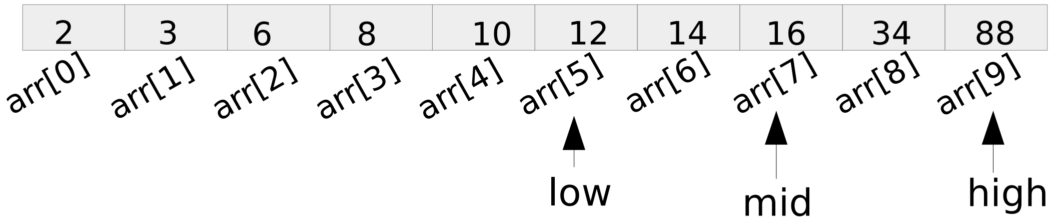

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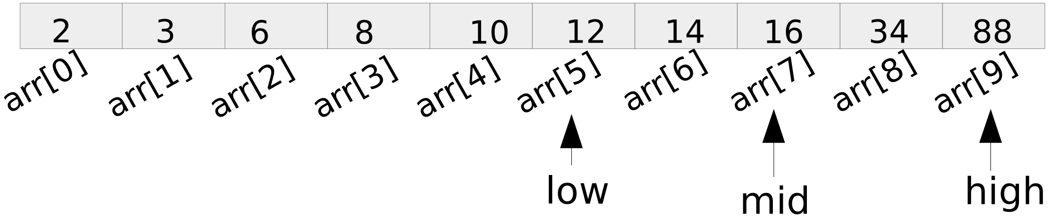

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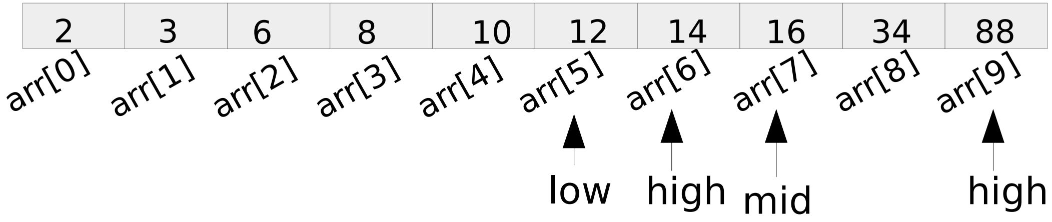

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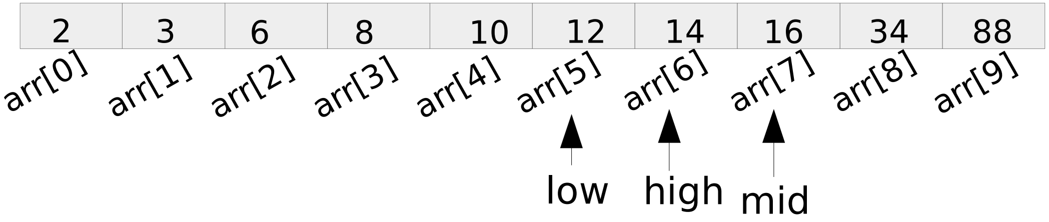

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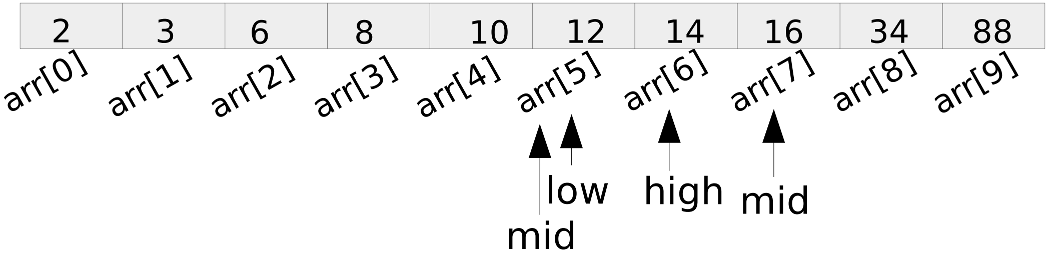

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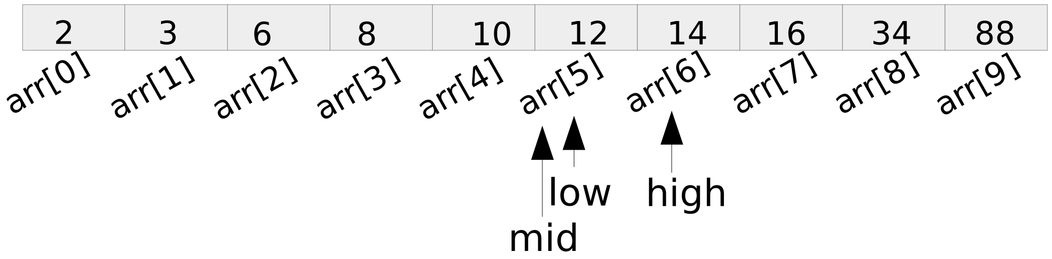

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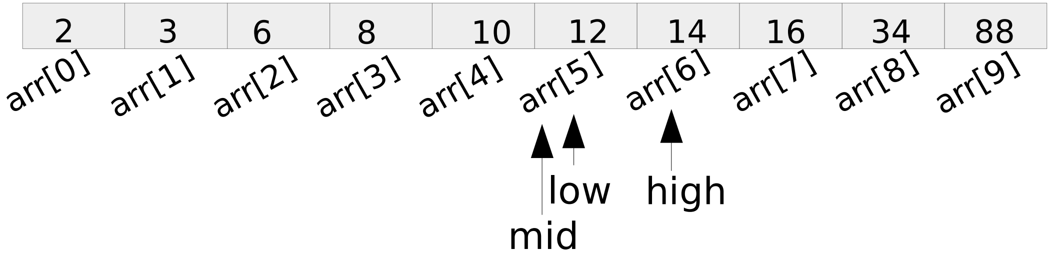

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Binary Search Iterative

- Efficient
- Space Complexity = O(1)
- Time Complexity = O(logn)

Binary Search Recursive

- Easy
- Space Complexity = O(logn)
- Time Complexity = O(logn)

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