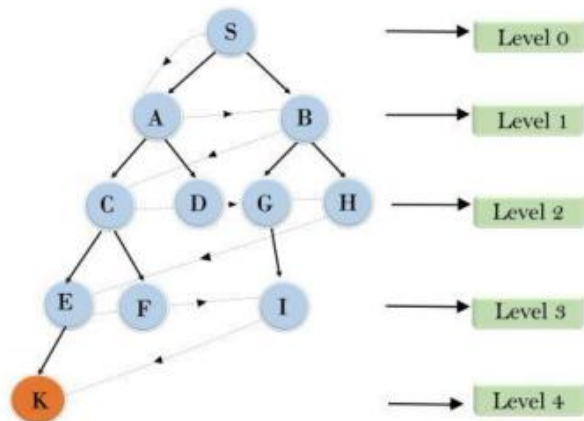
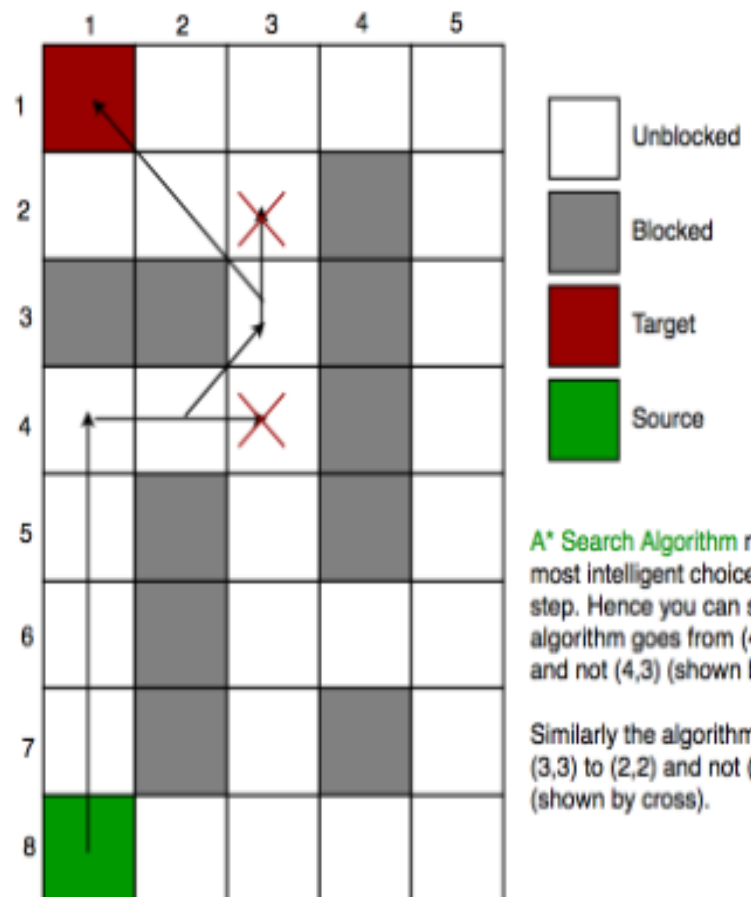
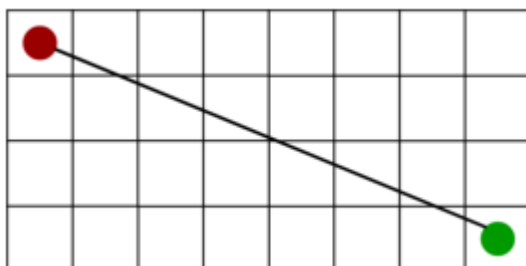
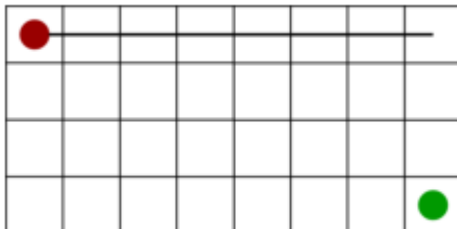
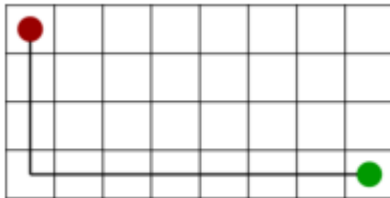
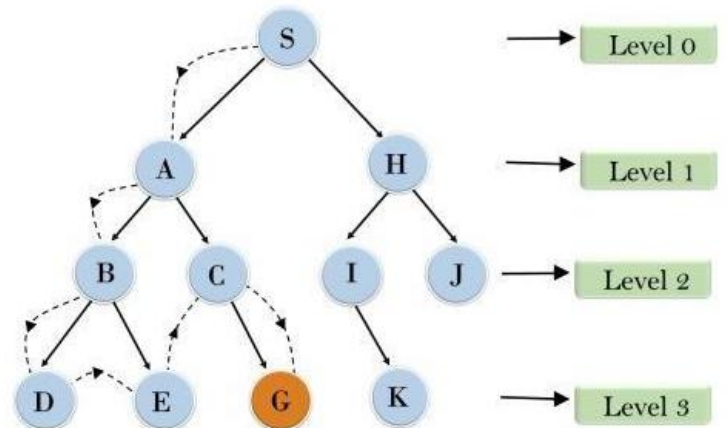


Breadth First Search

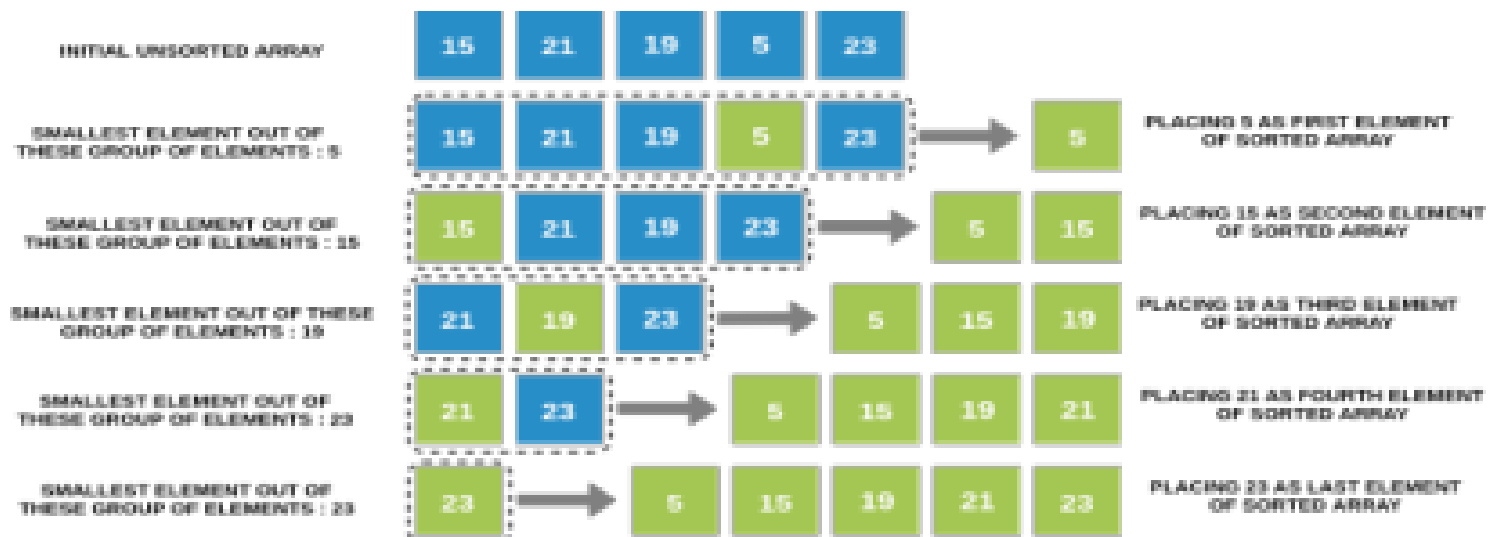


Depth First Search



A* Search Algorithm makes the most intelligent choice at each step. Hence you can see that algorithm goes from (4,2) to (3,3) and not (4,3) (shown by cross).

Similarly the algorithm goes from (3,3) to (2,2) and not (2,3) (shown by cross).

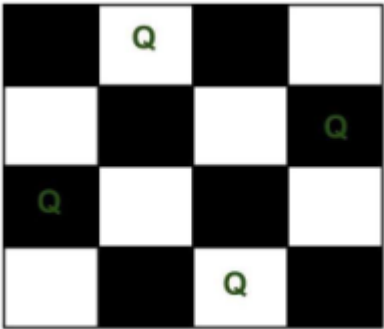


Selection Sort Algorithm



Comparison with other sorting algorithms

Algorithm Sort	Algorithm Average	Time Best	Time Worst	Features Space	Features Stability
Modified Selection Sort	$O(n^2)$	$O(n^2)$	$O(n^2)$	Constant	Stable
Modified Selection Sort	$O(n^2)$	$O(n)$	$O(n^2)$	Constant	Stable
Selection Sort	$O(n^2)$	$O(n^2)$	$O(n^2)$	Constant	Stable
Insertion Sort	$O(n^2)$	$O(n)$	$O(n^2)$	Constant	Stable
Heap Sort	$O(n \cdot \log(n))$	$O(n \cdot \log(n))$	$O(n \cdot \log(n))$	Constant	Unstable
Merge Sort	$O(n \cdot \log(n))$	$O(n \cdot \log(n))$	$O(n \cdot \log(n))$	Depends	Stable
Quick Sort	$O(n \cdot \log(n))$	$O(n \cdot \log(n))$	$O(n^2)$	Constant	Stable



UNSORTED INPUT



STABLE SORT



UNSTABLE SORT



Graph Coloring

