

* Two ways of searching :-

(i) uninformed search (Blind search)

(ii) Informed search (Heuristic search)

uninformed searching	Informed searching
① Search without information	① Search with information
② NO knowledge	② use knowledge to find steps to solution.
③ Time consuming	③ Quick solution.
④ More complexity	④ Less complexity. (time, space)
⑤ used DFS, BFS, etc.	⑤ use A*, Heuristic DFS, Best first search.

* Information is also called heuristic.

BFS (Breadth First search)

→ It is also called uniformed search technique.

→ Used FIFO (Queue)

→ Shallowest Node

→ It is also called level wise searching.

→ It will always return answer. so it is called complete.

→ It always gives shortest result, so it is optimal.

→ Time Complexity : - $O(V+E)$
 $O(b^d)$; $b \rightarrow$ branch factor.
 $d \rightarrow$ depth.