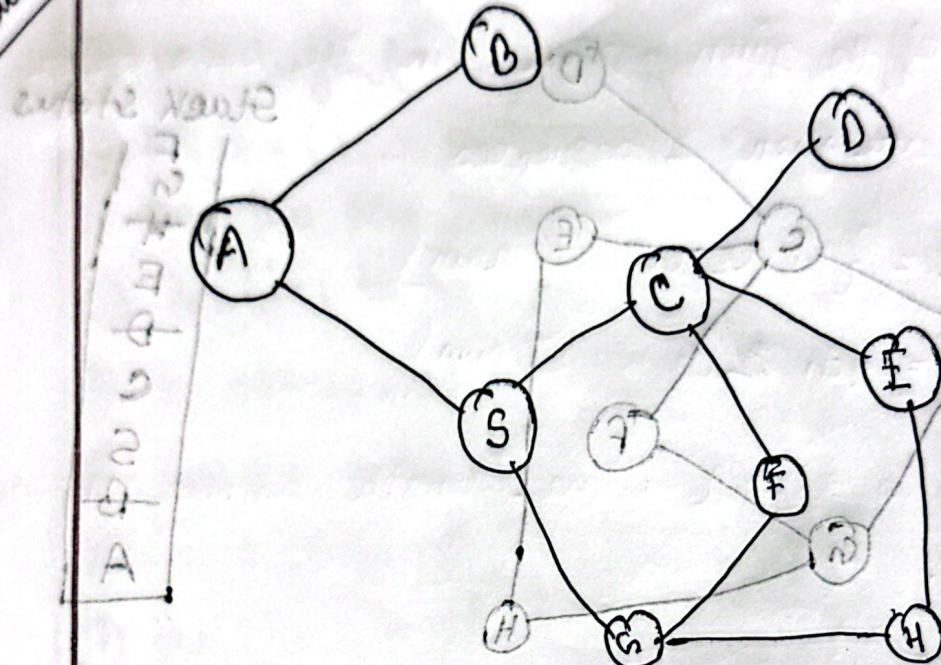


Breadth First Search

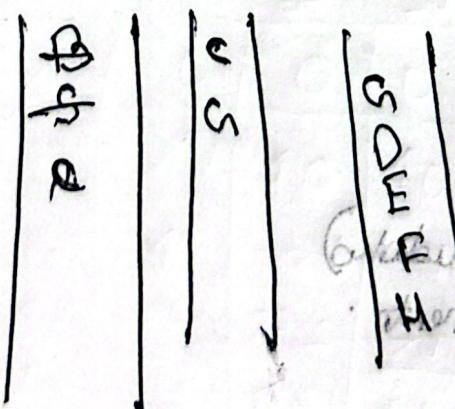
→ Queue



FRHECDGHA: visited

Queue status

Queue size 270



größtenteil
etwas in der grünen
grünen Leipziger
(Kinderkram) etwas grün
Hausgrüne betreut grün

now 270

Output: A B S C D E F H as a result trotz
betrieb es eben oft Strom -
plausiver war das bei betrieb ob die Strom -

Where BFS is used

- ① finding the shortest path in unweighted graph.
- ② Solving puzzles (like 8 puzzle, Rubik's cube).
- ③ finding connected components.
- ④ Web crawling
- ⑤ Network broadcasting.
- ⑥ Tree level-order traversal.

How BFS works

- ① Put starting node into a queue.
- ② Marking it as visited
- ③ While the queue is not empty
 - ① Remove first node from the queue.
 - ② Visit all unvisited neighbors of that node.
 - ③ Add those neighbors to the queue.