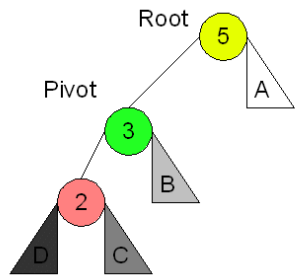


What do we do here?

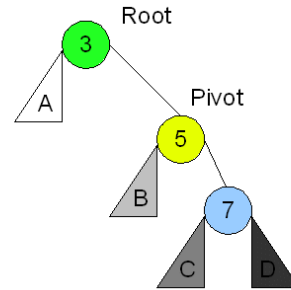
Left Left Case



1

What do we do here?

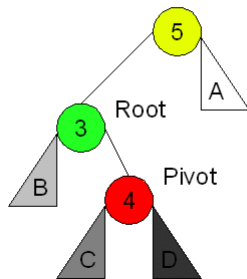
Right Right Case



2

What do we do here?

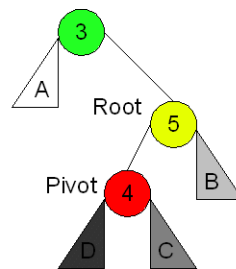
Left Right Case



3

What do we do here?

Right Left Case



4

What does a Depth First Search use?

5

What does a Breadth First Search use?

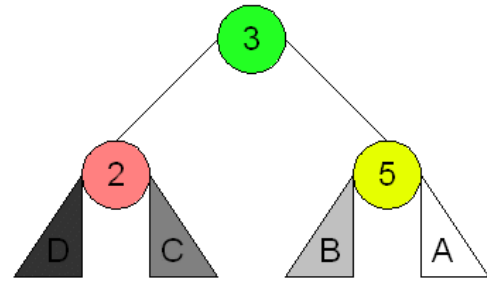
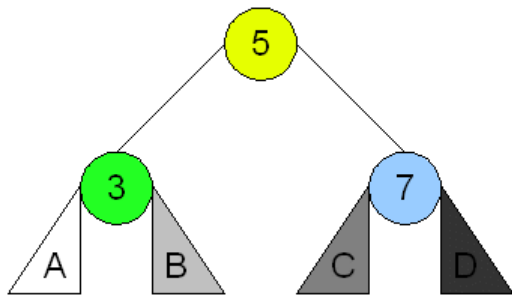
6

What is the running time of Dijkstra's algorithm?

7

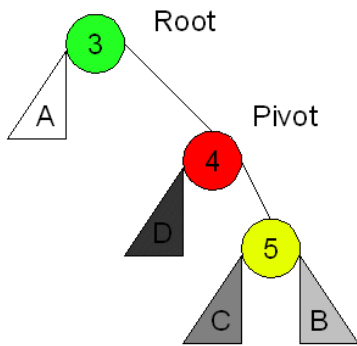
What's the running time of a depth first search when the graph is an adjacency matrix?

8

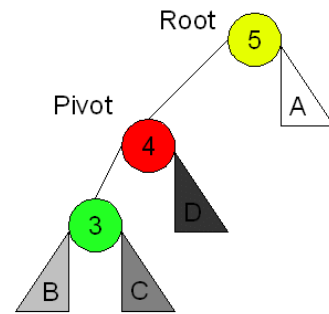


2

1



Then a right-right!



Then a left-left!

4

3

A queue!

A stack!

6

5

$O(V^2)$ since finding neighbours takes $O(V)$ time.

$O(E + V \log(v))$

8

7

What's the running time of a depth first search when the graph is an adjacency list?

$$O(V + E)$$