A Tree is also a graph   
Breadth- First Search is an algorithm for searching in a graph

It will progress Horizontal then vertical  
Breadth = broad/wide   
Queue (FIFO) is the important data structure to track the vertices

Visited Nodes are coloured black   
To be visited = Grey

BFS

A whiteboard with a diagram and numbers

Description automatically generated

You can start with any node  
When we are exploring a vertices, then you can visit any adjacent in any order.  
The strict rule is that all of the adjacent nodes of a node should be visited first to move to the next node

A whiteboard with a drawing of numbers and lines

Description automatically generated

If we start with 1 as the starting node  
If we start with 5 as the starting node   
ABOVE PICTURE

DFS

Fully exporle the new node till its all connections have been discroverd and then processed to the next ones

A person standing next to a whiteboard

Description automatically generated

This tree is like pre order traversal