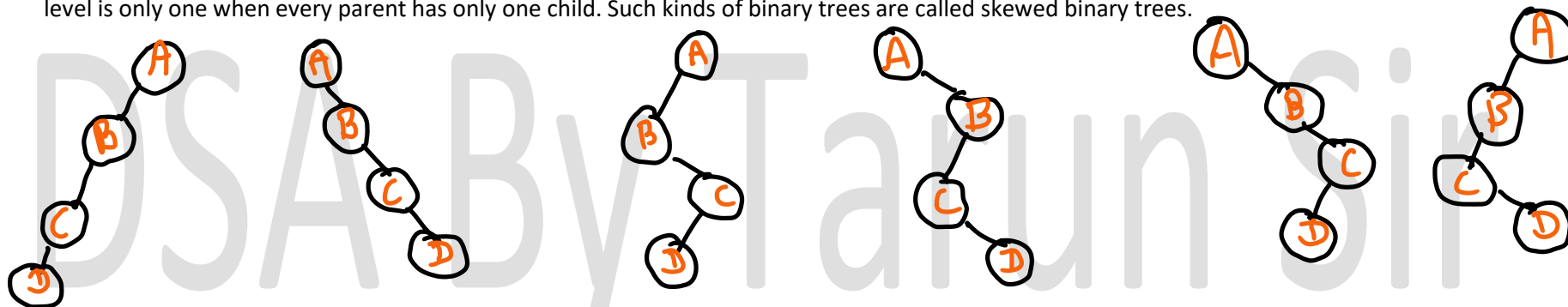


## Properties of binary tree

Hey programmers, here we will discuss the properties of binary trees.

1. **Maximum nodes on a level:** In a binary tree, the maximum number of nodes on level  $L$  is  $2^L$ .
2. **Maximum nodes in a binary tree:** The maximum number of nodes possible in a binary tree of height  $H$  is  $2^H - 1$ .
3. **Minimum number of nodes in a binary tree:** The minimum number of nodes possible in a binary tree of height  $H$  is  $H$ .

A binary tree has the minimum number of nodes if each level has the minimum number of nodes. The minimum number of nodes possible at every level is only one when every parent has only one child. Such kinds of binary trees are called skewed binary trees.



4. **Number of edges:** If a non-empty binary tree has  $N$  nodes then it will have  $N-1$  edges.