

Are non-linear data structure, is used for store data hierchically. The advantage of this DS is the capability of search and sorting.

Hash tables	Bad	Relative	Great
Insert		X	
Delete			X
lookup		X	
Sort	X		
Size			X

Declacation:

Struct node

{

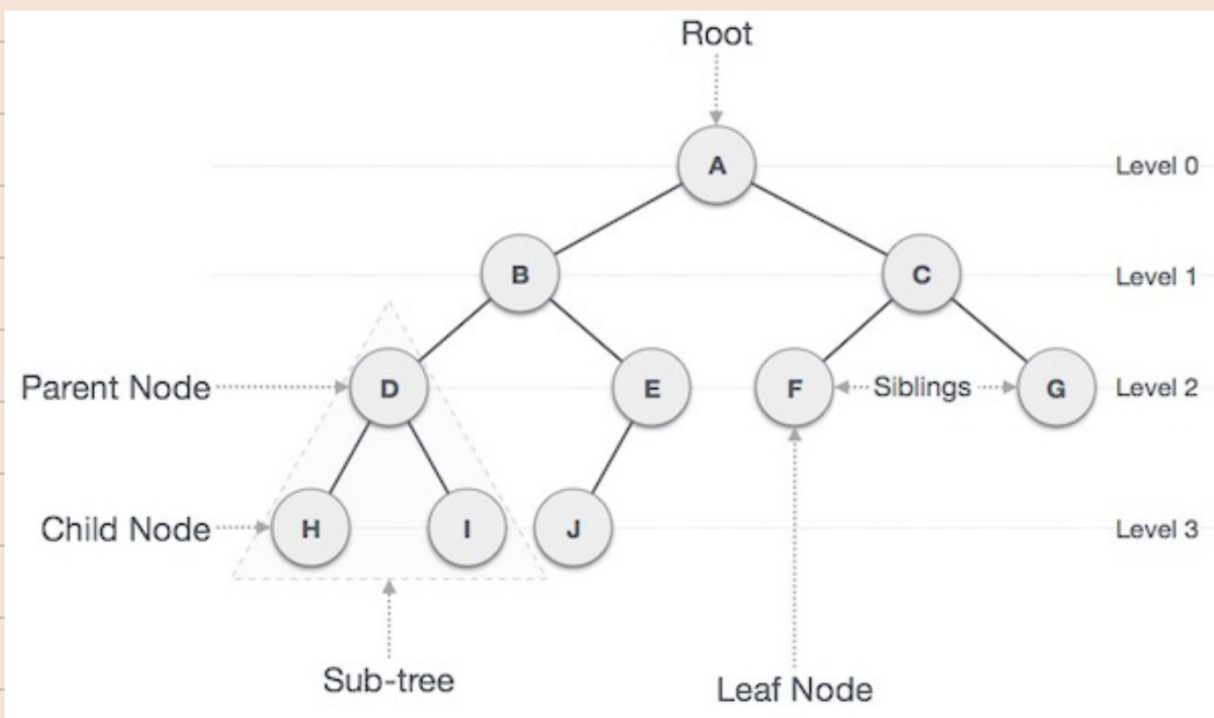
int data;

Struct node *left;

Struct node *right;

}

Anatomy:



Every tree starts with a root node. Children could be siblings or not.

Levels:

a) Maximum number of nodes are $2^L - 1$
where: L = levels

$$2^4 - 1 = 15 \text{ nodes}$$

b) Minimum number of level is $\log_2(N+1)$
where: N = nodes

