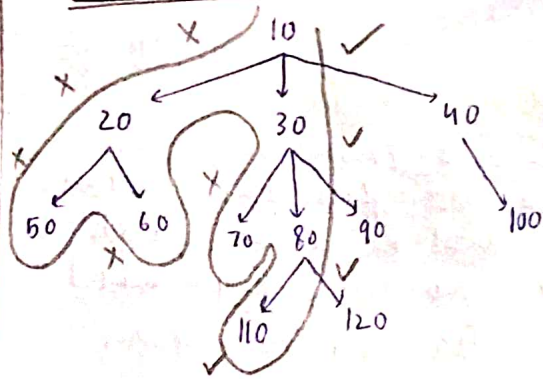


## FIND IN GENERIC TREE



\* Isse pura kula nahi chalega!

⇒ Hume ek element given hai, Aur hum tree me traverse krke vo element find krna hai!

Expectation: find() function return krega True agar data/element mila warna False return krega!

Faith: Humara faith hai ki root ke children phile se janty hai yeh task perform krna!

### Code

```
public static boolean find(Node node, int data)
```

```
{
    if (node.data == data)
    {
        return true;
    }

    for (Node child : node.children)
    {
        boolean fic = find(child, data);
        if (fic) {
            return true;
        }
    }

    return false;
}
```

⇒ Hume 110 node ko check krna hai!

⇒ Phile hum root node pe hai (10)

∴  $10 \neq 110$  FALSE

⇒ Toh hum, ab (10) ke First child pe aye (20) pe.

∴  $20 \neq 110$  FALSE

⇒ Toh hum, ab (20) ke First child pe aye (50) pe

∴  $50 \neq 110$  FALSE

⇒ Toh ab hum (20) ke 2nd child pe aye (60) pe

∴  $60 \neq 110$  FALSE

⇒ Toh ab hum (10) ke 2nd child pe gaye (30) pe

$30 \neq 110$  FALSE

⇒ Fir (30) ke 1st child pe aye (70) pe ∴  $70 \neq 110$  FALSE

⇒ Fir (30) ke 2nd child pe aye (80) pe ∴  $80 \neq 110$  FALSE

⇒ Aab (80) ke 1st child pe aye (110) pe ∴  $110 = 110$  TRUE

∴ Jaise hi humne desired node mil jayegi fir hum sidha wapis chale jayengey, ~~uske~~ uske agge ka traverse nahi krengy!