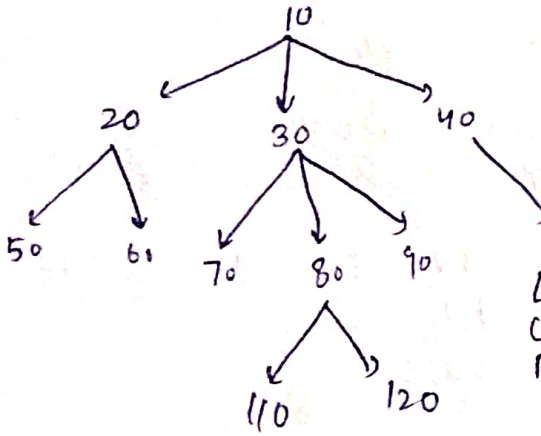
Distance Between two Nodes in a Generic Tree

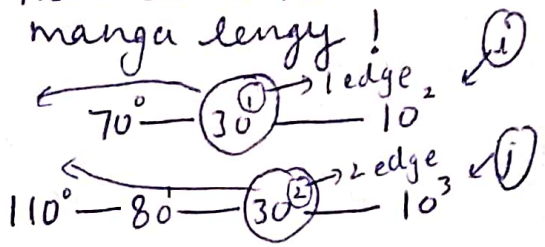
↳ In terms of Edges



Humse pucha gaya Distance bw [110, 70] Batao In terms of Edges !

KYA KRENGY ?

= Hum dono ka nodeToRootPath manga lengy !



Last common Banda

= Hum pichey se shuru krengy (10) se aur ~~[illegible]~~ loop lagayengy aur agar (i) aur (j) same huay toh i--, j-- aur jab nahi hua toh loop se breakout krjayengy !. Toh hum last common Milayega !

= ∴ [70, 110] ke nodeToRootPath me last Equal/common (30) tha !

= ∴ Last common point pe diverge hota hai !

= Toh hum path nikalana hai toh (70) se last common point (30) tak jayengy aur (110) ~~to~~ ki Araf mudh jayengy

= (30) ← 1 edge dur hai (70) se
2 edge dur hai (110) se] 2+1 → 3 total edge

Code

```
public static int distanceBetweenNodes(Node node, int d1, int d2)
{ ArrayList<Integer> p1 = nodeToRootPath(node, d1);
  ArrayList<Integer> p2 = nodeToRootPath(node, d2);
  int i = p1.size()-1;
  int j = p2.size()-1;

  while(i>=0 && j>=0 && p1.get(i) == p2.get(j))
  { i--;
    j--;
  }
    i++;
    j++;
    return i+j;
}
```