

# Graph Balancing Algorithm

$D \rightarrow$  Depth tree

```
For each level  $l$  in  $D$ 
  For each node  $m$  in  $l$ 
    For each input  $i$  of  $m$ 
       $l_i \leftarrow$  level of  $i$  in  $D$ 
       $l_m \leftarrow$  level of  $m$  in  $D$ 
      While  $l_i \neq l_m - 1$  *
         $p_{\text{node}}$   $\leftarrow$  insert  $p_{\text{node}}$  between  $(i, m)$  * *
        erase edge from  $(i, m)$ 
         $i = p_{\text{node}}$ ,  $l_i =$  level of  $i$  in  $D$ 
      --  $p_{\text{node}}$ 
```

Loops until a pseudo node is created at level  $l_m - 1$ ,  
target node  
source predecessor