Algorithm 2: compute set of active servers and switches

input: (V,E) // set of nodes and links in datacenter

input: n // number of active servers

output: R // set of switches that are in active state

S = select n leftmost leaf nodes // servers in active state

T = {} // traffic sent towards root node by each node

For v in V:

If v \in S:

B = total outgoing link capacity

T[v] = B; R = R \cup {v}

Else:

T[v] = 0

H = height of tree // leaves have height 0

For h in 0, 1, .., (H - 1):

V\_h = ordered list of node at height h in left to right order

For v in V\_h:

P = parents of node v in left to right order

For p in P:

If T[v] == 0:

Break // this node has no traffic to send upwards

R = R \cup {p} // Parent p must be active

L = link capacity of edge (v, p)

traffic = min(T[v], L)

T[p] += L

T[v] -= traffic