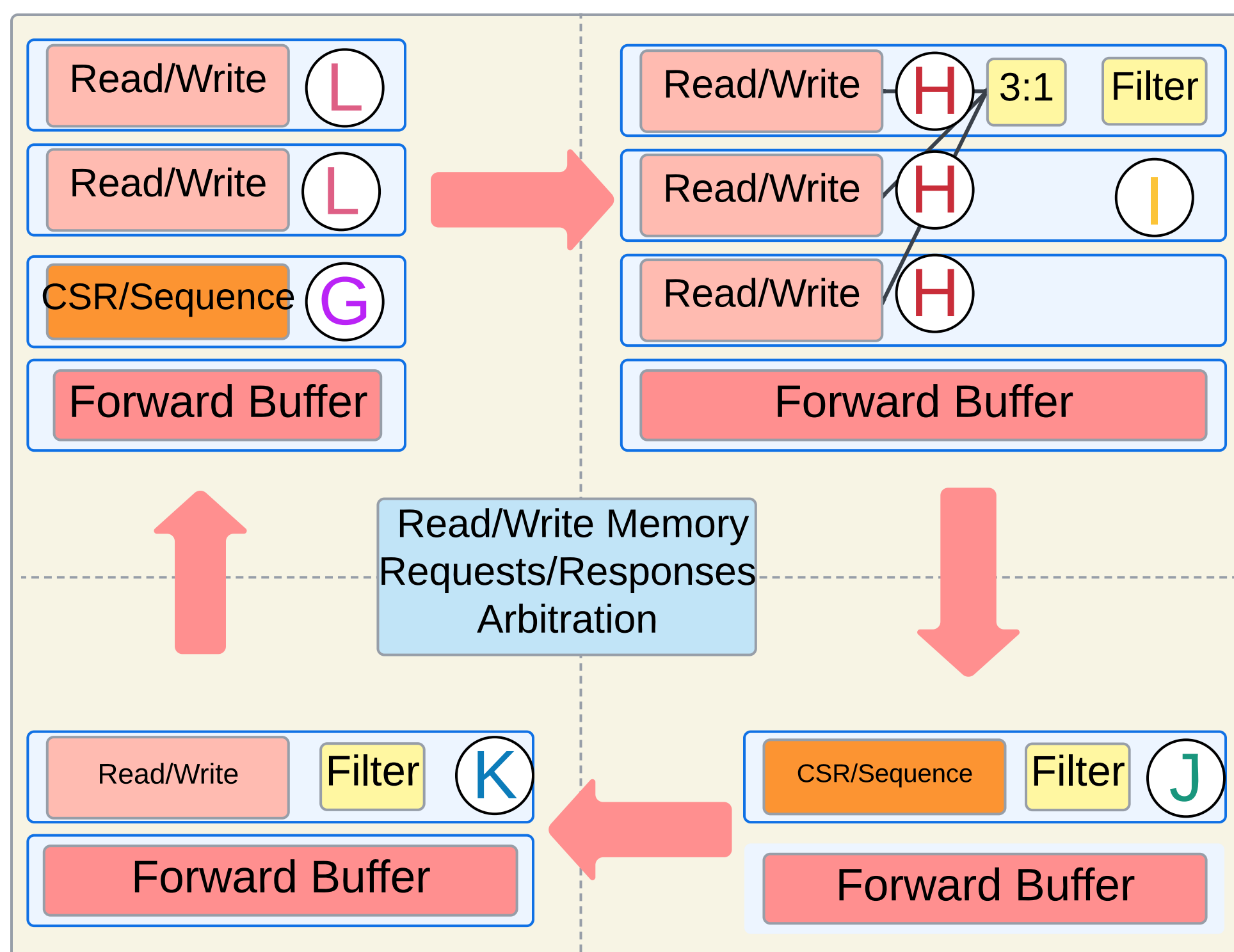


GraphBlox.BFS



function BFS-bottom-up-step(vertices, frontier, next, parents)

SCHEDULE Vertices

for $v \in \text{graphCSR}$ **do**

READ $\text{graphCSR} \rightarrow \text{inDegree}[v]$

READ $\text{graphCSR} \rightarrow \text{edgeIdx}[v]$

READ $\text{parents}[v]$

if $\text{parents}[v] = -1$ **then**

for $n \in \text{inNeighbor}[v]$ **do**

READ $\text{graphCSR} \rightarrow \text{inNeighbor}[v]$

READ $\text{frontier}[n]$

if $n \in \text{frontier}$ **do**

WRITE $\text{parents}[v]$

WRITE $\text{next}[v]$

$\text{parents}[v] \leftarrow n$

$\text{next} \leftarrow \text{next} \cup \{v\}$

break

end if

end for

end if

end for

(G)

(H)

(I)

(J)

(K)

(L)