By looking at the figure it is clear that the value at node A is the sum of the values of its children. The index of node A is at $2^{h+1} - 1$ which is the same as its right child. The left child of A has index $2^h - 1$. Let S be the array then

$$S[2^{h+1} - 1] = S[2^h - 1] + S[2^{h+1} - 1]$$

For node B it is the same except we shift the indices by 2^{h+1} to the right. Therefore for nodes at level $h + 1$ we have

$$S[k + 2^{h+1} - 1] = S[k + 2^h - 1] + S[k + 2^{h+1} - 1]$$

where k starts with 0 and is incremented by 2^{h+1}.

forall $k = 0, k < n$ *multiples of* 2^{h+1} **do**
| $S[k + 2^{h+1} - 1] = S[k + 2^h - 1] + S[k + 2^{h+1} - 1]$
end