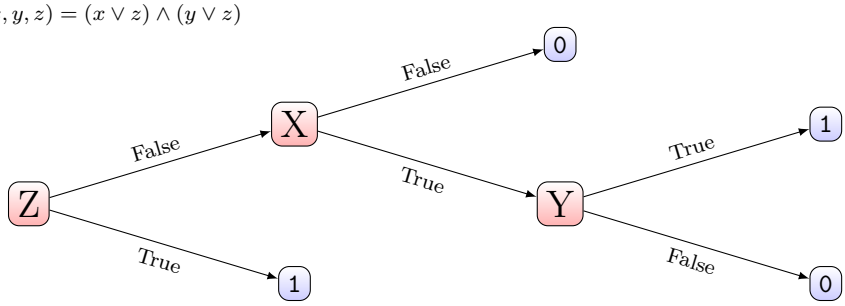
$f(x, y, z) = (x \vee z) \wedge (y \vee z)$



- The variable z was chosen as the first node, because if $z = 1$, then $f(x, y, z) = 1$.
- If z is False, the function could lead to both x or y, giving the commutative property. In case x is False, the output will be 0.
- If x is True, the last variable to be analyzed is y. Similarly to x, y needs to be True, in order to the output equals 1.