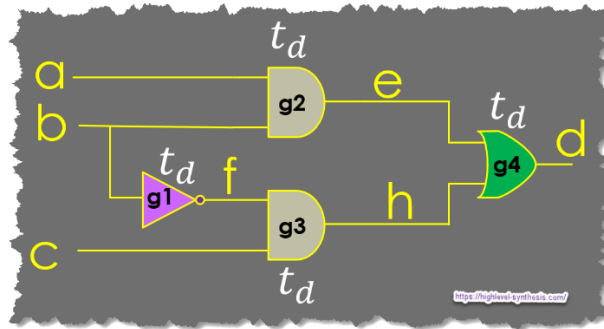


Quiz-1

These are the paths in the circuit and their corresponding propagation delay.



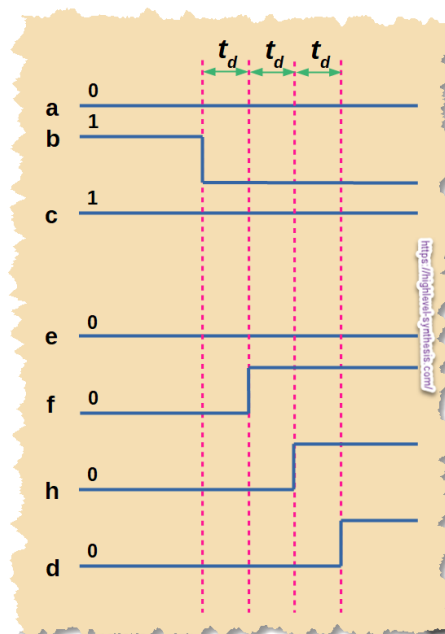
P1: $a \rightarrow e \rightarrow d \dots\dots\dots 2t_d$

P2: $b \rightarrow e \rightarrow d \dots\dots\dots 2t_d$

P3: $b \rightarrow f \rightarrow h \rightarrow d \dots\dots\dots 3t_d$

P4: $c \rightarrow h \rightarrow d \dots\dots\dots 2t_d$

Therefore, the circuit propagation delay is $3t_d$ and the following diagram shows the circuit signals timing diagram.



Quiz-2

As the longest path passes through 2 gates, then the circuit propagation delay is $2t_d$.

