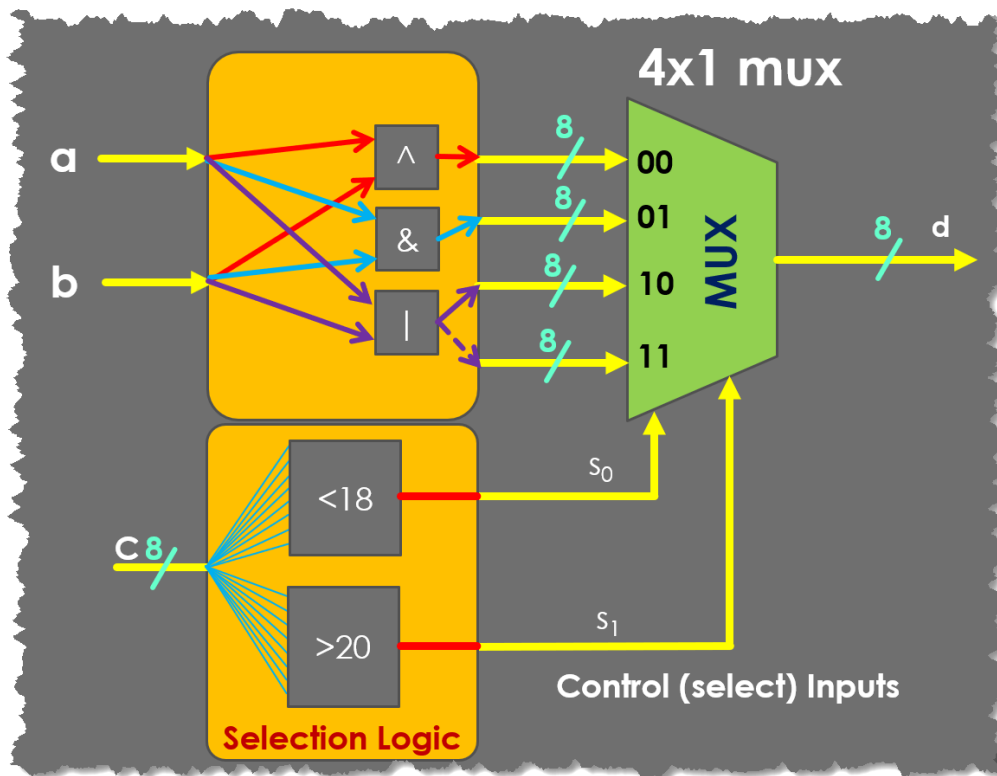


The following figure shows the circuit structure of the if-else statement in the quiz question.



If c is less than 18 then $S_0 = 1$ and $S_1 = 0$, or the select input is "01". Therefore, the $(a \& b)$ function is connected to the output.

If c is greater than 20 then $S_0 = 0$ and $S_1 = 1$, or the select input is "10". Therefore, the $(a \vee b)$ function is connected to the output.

Otherwise, $S_0 = 0$ and $S_1 = 0$ or the select input is "00". Therefore, the $(a \wedge b)$ function is connected to the output.