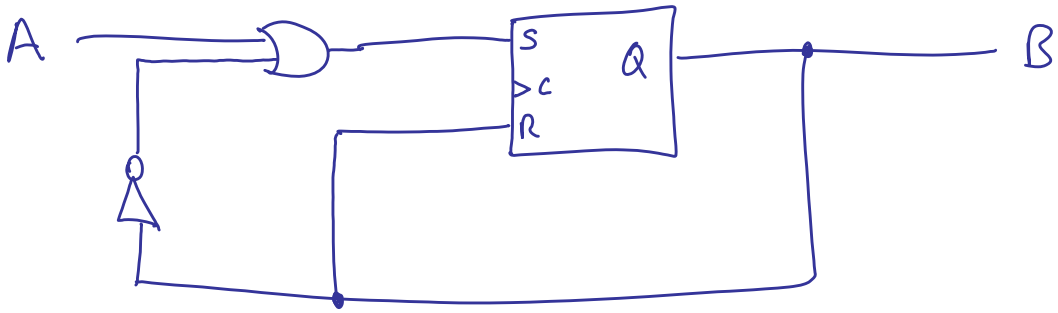
Simple, important example that demonstrates clock behavior



Obviously, if A=1 and clock ticks, then B=1.

But if A goes to zero and stays there, what happens at subsequent clock ticks? (Work it out for yourself: B alternates between 0 and 1 at each tick)

Very important lesson: new value of B does <u>not</u> feed back into the flip flop's input until the <u>next</u> clock tick.