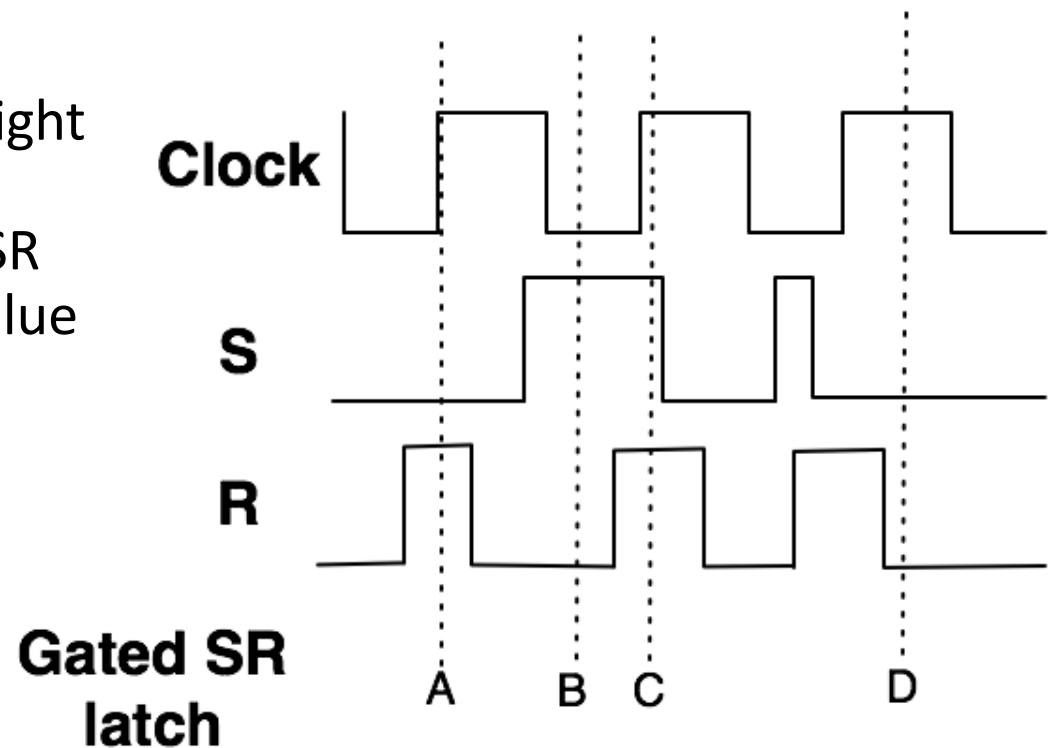


Quiz 1: Ten minutes

1. In one sentence, describe a situation where you might use a *multiplexer*.

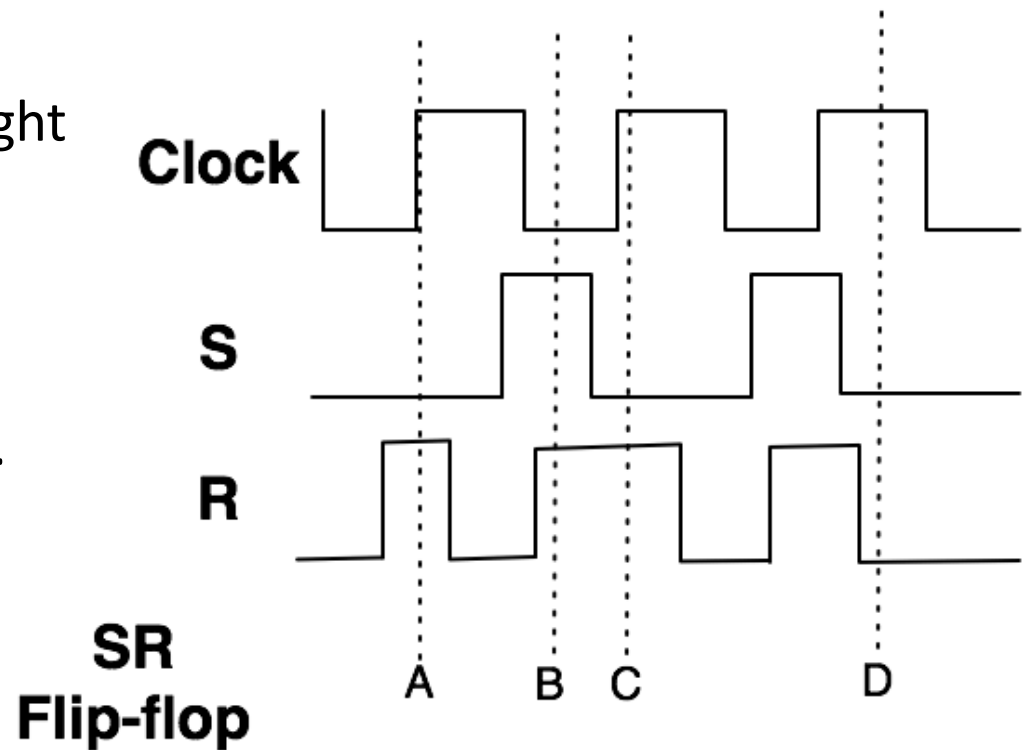
2. The timing diagram to the right describes a particular set of inputs provided to a gated SR latch. Provide the output value of the latch at the points labeled A, B, C, and D.



Quiz 1: Ten minutes

1. In one sentence, describe a situation where you might use a *decoder*.

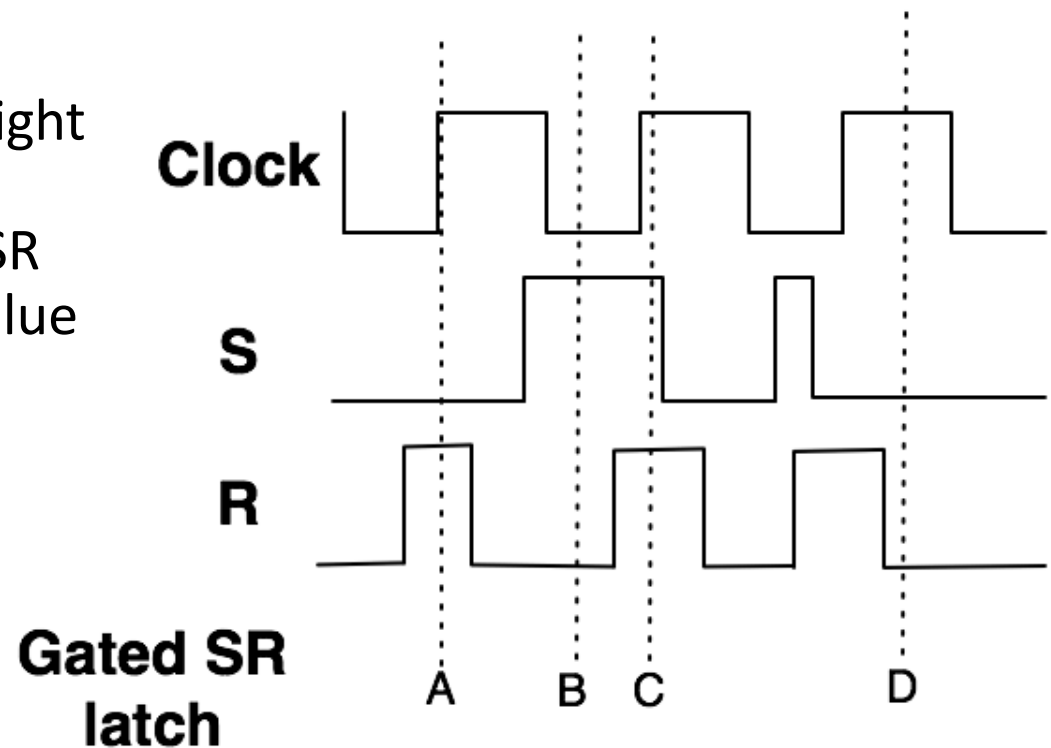
2. The timing diagram to the right describes a particular set of inputs provided to an SR flip-flop. Provide the output value of the flip-flop at the points labeled A, B, C, and D.



Quiz 1: Ten minutes

1. In one sentence, what is the key difference between a *latch* and a *flip-flop*?

2. The timing diagram to the right describes a particular set of inputs provided to a gated SR latch. Provide the output value of the latch at the points labeled A, B, C, and D.



Quiz 1: Ten minutes

1. In one sentence, explain why you might wish to use a *flip-flop* instead of a *latch*.

2. The timing diagram to the right describes a particular set of inputs provided to an SR flip-flop. Provide the output value of the flip-flop at the points labeled A, B, C, and D.

