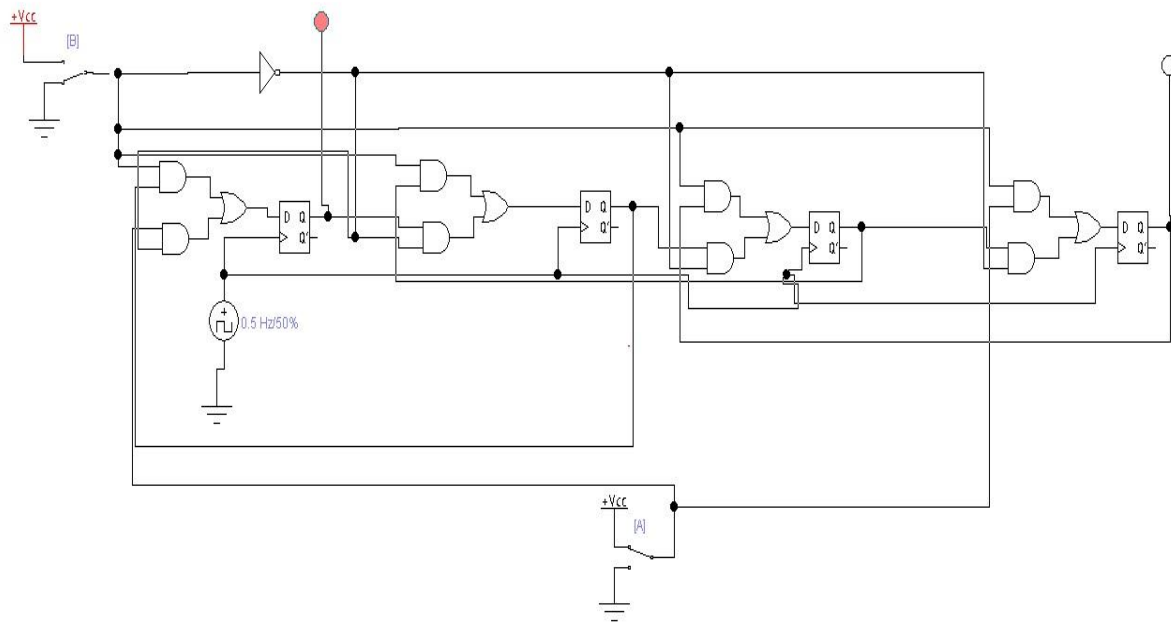


Q₁/



Q₂:|

- 1- An asynchronous is also called **ripple** counter or a **serial** counter.
- 2- For down-counters, the **Q** of the first flip-flop is used as a clock pulse for the second flip and so on, when the flip-flops respond to the positive edge of the clock pulse.
- 3- The F.F. that can be used as a parallel data storage is **D F.F.**
- 4- The ring counter, also called a **circulating register**.
- 5- The difference state in binary for a counter divided by 4000 using 74HC161 four bits counter only is **(60)_{hex}**.

Q₃/

