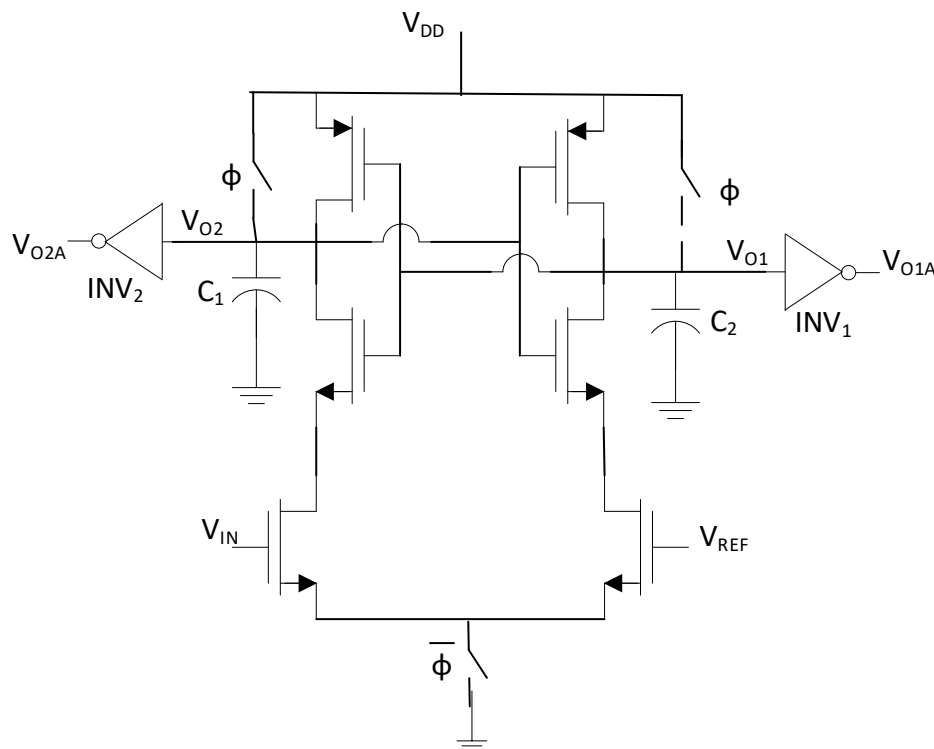


Dynamic Comparators

One of the most simple dynamic comparators is shown in Figure 1.



1. Design this amplifier with minimum-sized devices and determine the off voltage. Initially neglect the load capacitors C1 and C2 and the Inverters.
2. How does the offset voltage change if C2 and C1 are 500fF capacitors? What effect does changing C1 to 510fF have on the offset voltage.
3. What happens to the offset voltage if one inverter, the one on the right, is added to post-process the Boolean output?

