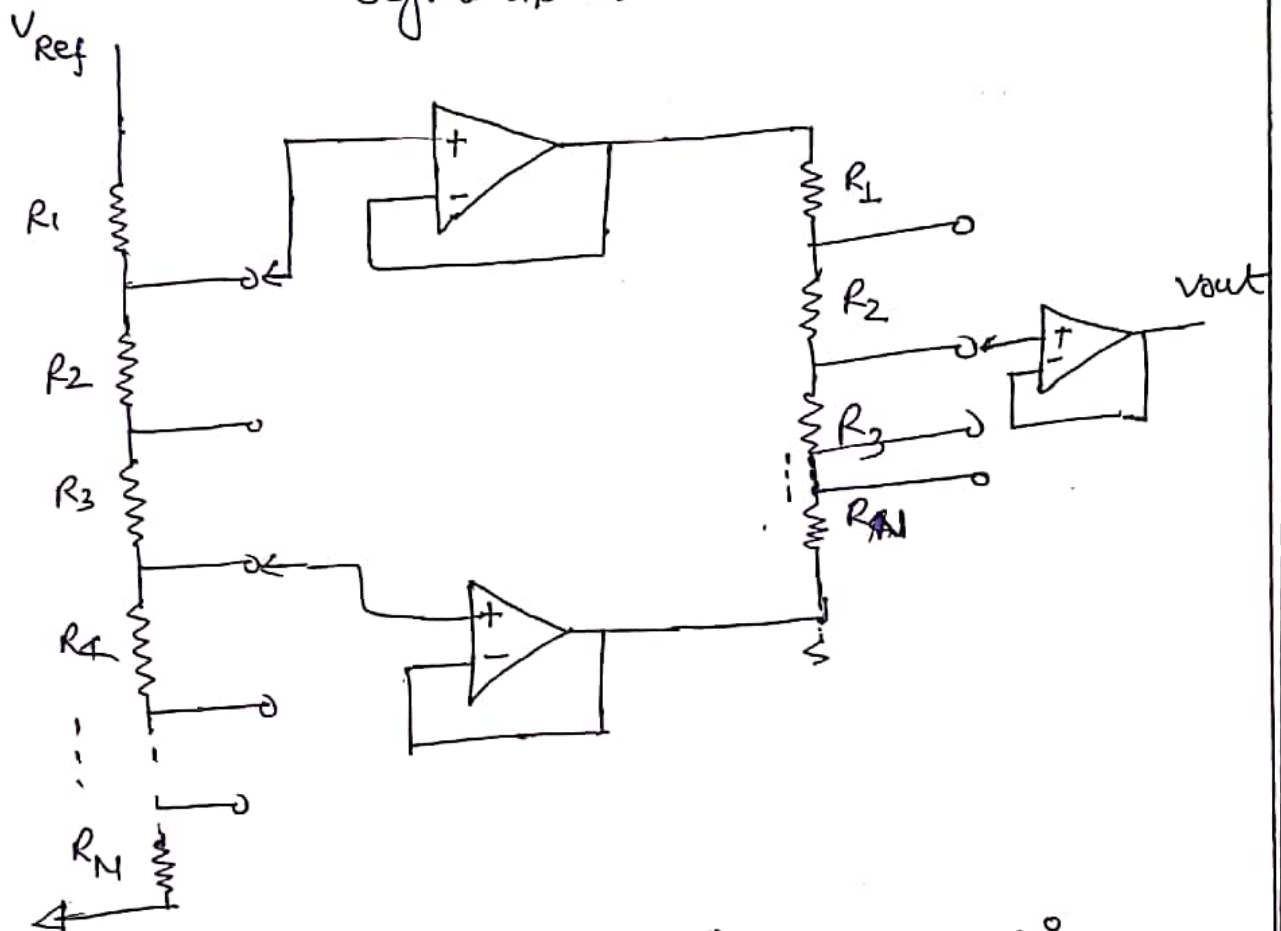


- ③ Segmented architecture -
 it can be used for both current and voltage output
 DACs. Monotonicity is easily achieved because the individual segments have lower resolution.



- ④ R-2R Ladder Architecture (it is used, where higher resolution required)
 ⑤ Delta-sigma Architecture.

Manufacturing process ~

Architecture is not the sole contributor to DAC performance. DACs are made up of from a combination of switches, resistors, amplifiers, and logic.

However, device scaling is difficult, so a R-2R architecture is required for higher resolution. Also this approach typically consumes higher power and it can not be integrated easily with digital signal processing. CMOS processes are ideal for making high-density low power logic and switches, but are less suitable for amplifiers.

CMOS processes are ideal often preferred for DACs, requiring low power and small package. For a DAC implemented in a CMOS process, scaling issues are simplified, so there is no need for an R-2R network and its drawback.