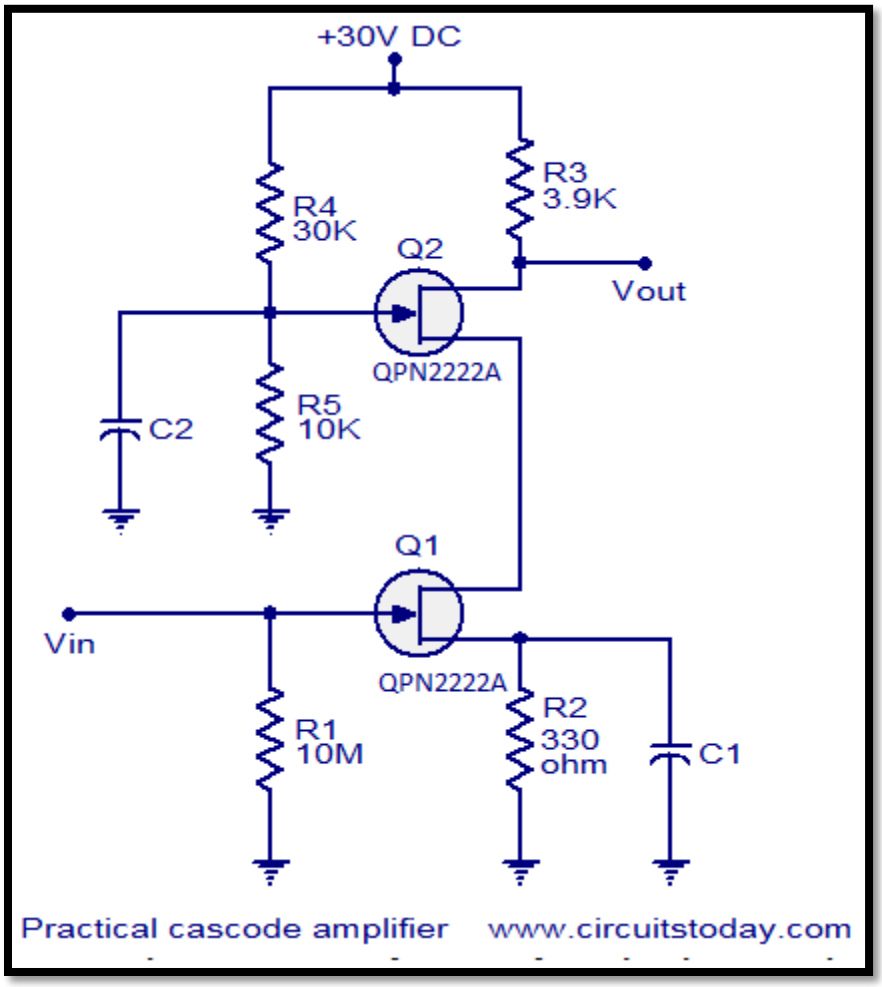
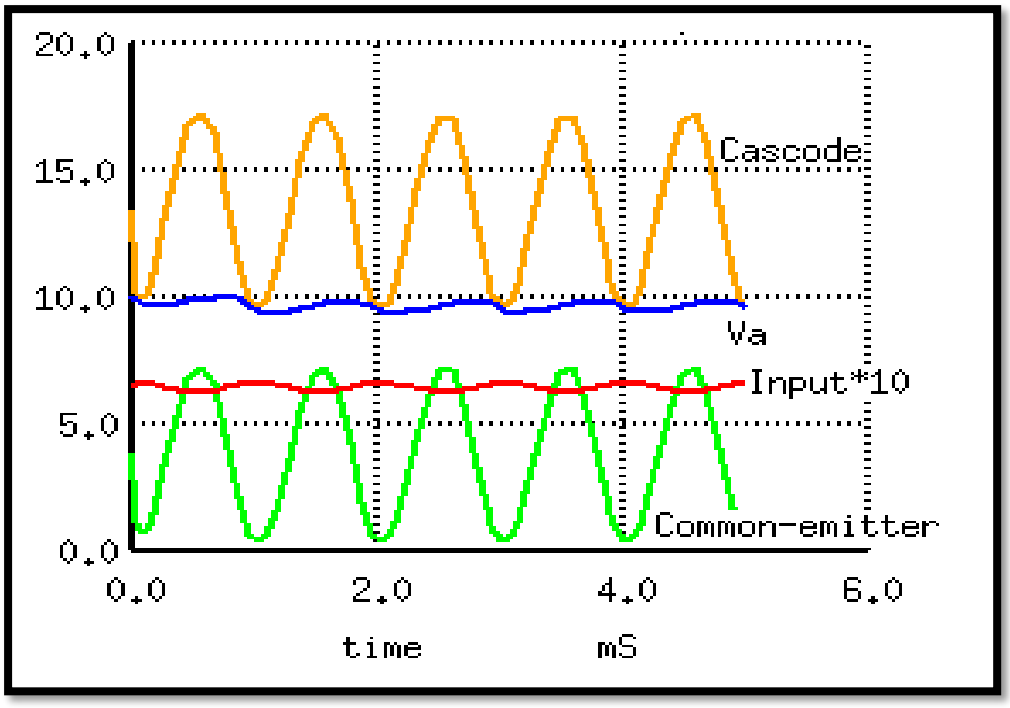
PRACTICAL CASCODE AMPLIFIER

A Cascode amplifier consists of a CE amplifier followed by a CB amplifier. The CE amplifier is directly coupled to the CB amplifier. Hence a Cascode amplifier is defined as a direct coupled CE-CB amplifier. The CE amplifier drives a CB amplifier for both DC and AC inputs. A practical Cascode amplifier circuit consists of resistors R4 and R5 forming a voltage divider biasing network for the FET Q2. R3 is the drain resistor for Q2 and it limits the drain current. R2 is the source resistor of Q1 and C1 is its by-pass capacitor. R1 ensures zero voltage at the gate of Q1 during zero signal condition.

CIRCUIT DIAGRAM:



SIMULATION OUTPUT:



In this simulation output the SPICE output version of both cascode and common emitter amplifier is compared.