

Q1. Find out the Voltage gain of the amplifier of the circuit shown in Fig.1. Choose the component and transistor parameters in the SPICE program. Choose the input DC bias. Provide the SPICE code and results (AC and Transient both).

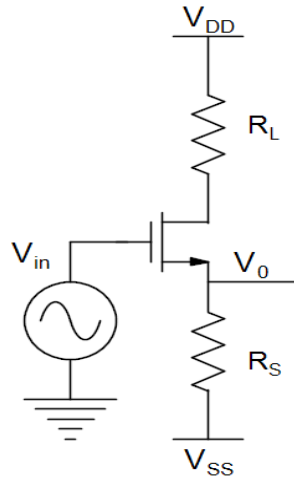


Fig.1: Schematic of Amplifier

Q2. Find out the Voltage gain of the amplifier of the circuit shown in Fig.2. Choose the component and transistor parameters in the SPICE program. Provide the SPICE code and results (AC and Transient both).

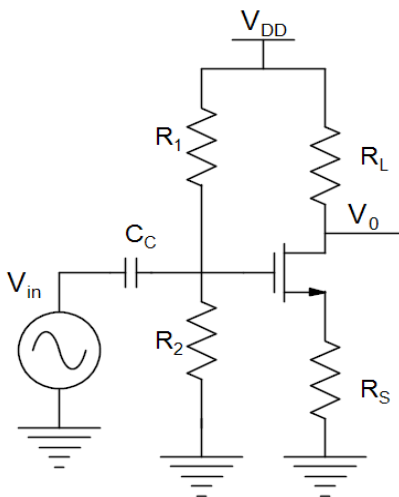


Fig.2: Schematic of Amplifier

Q3. Find out the Voltage gain of the amplifier of the circuit shown in Fig.2 by removing the coupling capacitor, C_C and incorporating negative bias. Choose the component and transistor parameters in the SPICE program. Provide the SPICE code and results (AC and Transient both).