Biasing:

Choose one of \( R_A, R_B \) large say \( 1 \text{ Meg} \cdot \Omega = 10^6 \) Ω.

**Case:** \( V_{GS} = 3 \) V and \( V_{DD} = 9 \) V, choose \( R_B = 1 \text{ Meg} \cdot \Omega \)

\[
Rh: \quad V_{GS} = 3 \text{ V} \quad \text{and} \quad V_{DD} = 9 \text{ V}
\]

\[
\Rightarrow \quad \text{find } R_A \Rightarrow \quad (1 + \frac{R_A}{R_B})V_{GS} = V_{DD} \Rightarrow \quad \frac{R_A}{R_B} = \frac{V_{DD} - V_{GS}}{V_{GS}}
\]

\[
= -1 + \frac{9}{3} = 2 \Rightarrow \quad R_A = 2 \times R_B = 2 \text{ Meg} \cdot \Omega
\]
\[ V = \frac{C}{\frac{1}{f_c}} \]

\[ \int_{V_1}^{V_2} \frac{dV}{R} = \int_{I_2}^{I_1} \frac{di}{C} \]

The voltage across the capacitor is given by:

\[ V = \frac{C}{\frac{1}{f_c}} \]

\[ \int_{V_1}^{V_2} \frac{dV}{R} = \int_{I_2}^{I_1} \frac{di}{C} \]

As a comprehensive representation of the circuit, the diagram shows the components connected as follows: