given: $U_B := 12\,\text{V}$, $U_{BE} := 0.6\,\text{V}$, $U_T := 0.03\,\text{V}$, $\beta_{DC} := 200$, $R_L := 180\,\text{Ohm}$, $I_C := 0.035\,\text{A}$;

1.) Calculate Bias Voltages:

$U_{RE} := 0.5 \cdot U_B = 6$ V $\quad$ $U_{CE} := 0.5 \cdot U_B = 6$ V

2.) Calculate R_E:

$R_E := \frac{U_{RE}}{I_C} = 171.429$ Ohm ~ $R_E := 165$ --> 330R // 330R $\quad$ $I_C := \frac{U_{RE}}{R_E}$

3.) Calculate I_B & I_q:

$I_B := \frac{I_C}{\beta_{DC}} = 0.0001818$ A = 182uA $\quad$ $I_q := 10 \cdot I_B = 0.001818$ A = 1.82mA

4.) Calculate Bias Resistors:

$R_1 := \frac{U_B - U_{RE} - U_{BE}}{I_q + I_B} = 2700$ Ohm = 2.7k

$R_2 := \frac{U_{RE} + U_{BE}}{I_q} = 3630$ Ohm = 3.9k

5.) Calculate Z_{IN}:

$r_{BE} := \frac{U_T}{I_B} = 165$ Ohm

$$Z_{IN} := \frac{1}{\frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{r_{BE} + \beta_{DC} \cdot \left(\frac{R_E \cdot R_L}{R_E + R_L} \right)}} = 1421.703 \text{ Ohm}$$

6.) Calculate u_a:

$u_a := I_C \cdot \left(\frac{R_E \cdot R_L}{R_E + R_L} \right) = 3.13$ Vp ~ 6.2Vpp

7.) Calculate V_U: $\quad V_U < 1$