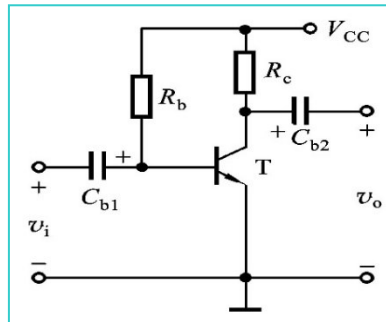
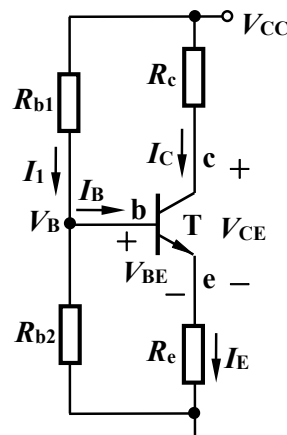


## Practice Exercise \_Lecture 3

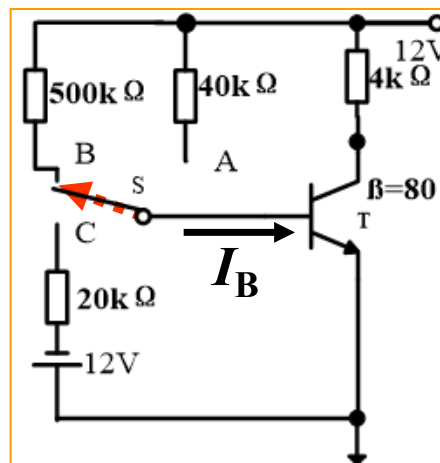
- For a BJT-based amplification circuit, we measure the voltage of  $V_{CE}$ , and find its value approximately equal to  $V_{CC}$ , please evaluate the operating state of the circuit and also list the possible reasons resulting in the phenomenon.



- Give the formulae to calculate the Q point of the following circuit? ( $I_1 \gg I_B$ )



- Calculate the Q point of the following circuit and also evaluate what region does the transistor operate? ( $V_{BEQ} = 0.6 \text{ V}$ )



4. Please evaluate what region does the transistor operate and calculate the Q point of the following circuit ( $V_{BEQ} = 0.6 \text{ V}$ )

