Lab.

Given an npn BJT having $I_s=10^{-16}$ A, $\beta=200$, and $V_A=25V$, use SPICE to obtain:
1. the output characteristics. Allow $v_{CE}$ to range from 0 to 10 V, and let $i_B=0, 10, 20, 30, 40$ and $50\mu A$.
2. the input characteristics. Set $v_{CE}=10V$, and allow $v_{BE}$ to range from 0 to 0.7V

In the report:
1. draw the circuit(s) you used to obtain the characteristics
2. attach your spice deck(s)
3. explain the rationale behind your work
4. attach the output characteristics plot
5. attach the input characteristics plot