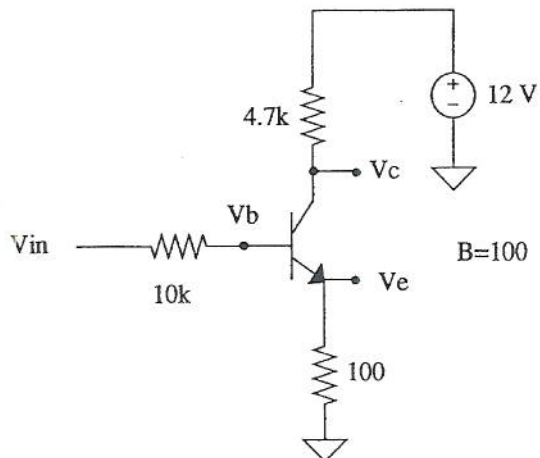


12. For the schematic below, a set of conditions are described. For each given condition, circle the correct region of operation.



$V_E = 0V$	Off	Saturated	Active Fwd
$I_B = 0, I_C = \beta I_B$	Off	Saturated	Active Fwd
$I_B = 10\mu A, I_E = 1.01mA$	Off	Saturated	Active Fwd
$V_{BE} = -1V$	Off	Saturated	Active Fwd
$V_E = 0.1V$	Off	Saturated	Active Fwd
$V_{CE} = 0$ (throw out)	Off	Saturated	Active Fwd
$I_E = 2mA, V_C = 9.4V$	Off	Saturated	Active Fwd
$I_E \neq (\beta+1)I_B, I_B = 10mA$	Off	Saturated	Active Fwd
$V_C = 12$	Off	Saturated	Active Fwd
$V_C = 1, I_E = 8mA$	Off	Saturated	Active Fwd