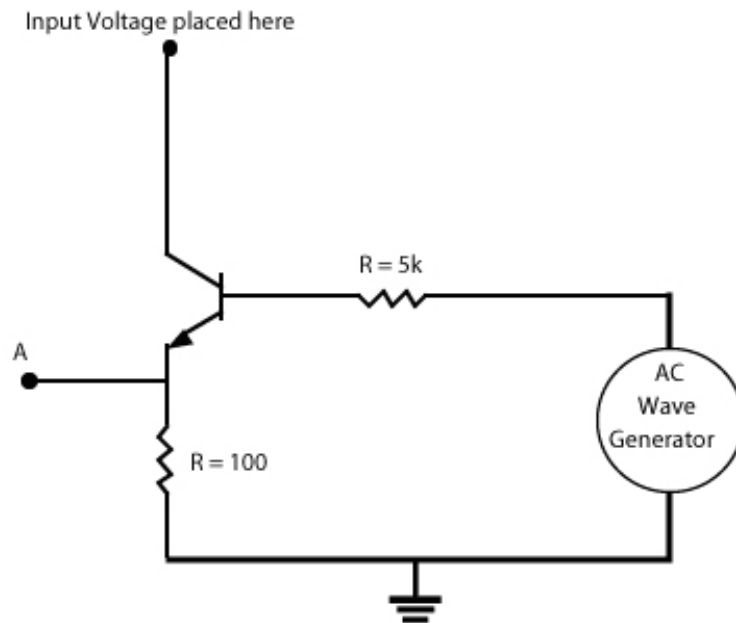


SP.764 Fall 04 - Problem Set 4



Assume that the transistor has $\beta = 100$ and that the AC wave generator is producing a 0 V to 5 V sine wave.

1. Sketch a plot the output of the AC wave generator as a function of time.
2. Below that, sketch a plot of the base current (equal to the current through the 5k resistor) as a function of time.
3. Below that, sketch a plot of the current through the 100 Ohm resistor, as a function of time, assuming that the input voltage is +35.6 V.
4. Below that, sketch a plot of the voltage at the point A as a function of time.
5. Repeat steps 1-4 for the case where the input voltage is +5.6 Volts.