

Generating pulse or train for controlling digital device
by op-amp comparator :

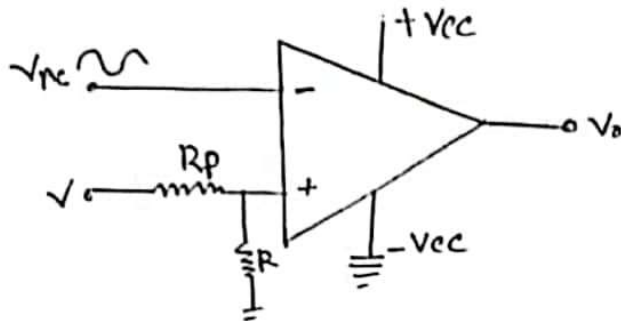
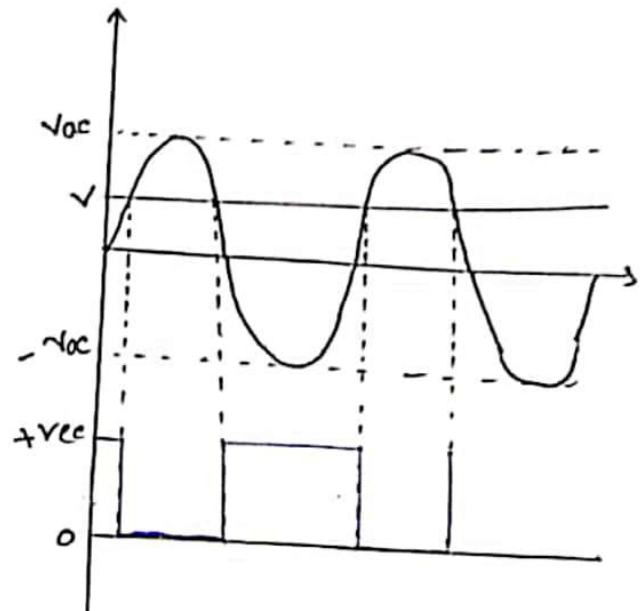


fig: Op-AMP Comparator



First we take a comparator circuit. This comparator circuit has two input part : (i) Inverting and (ii) non-inverting. Here adding a sine wave in inverting input part and create reference voltage (R_p) for non-inverting and adding a resistor (R) now comparing sin wave and R_p . If non-inverting ^{voltage} is greater then the output is $+V_{sat}$. On the other if inverting voltage is greater then the output is $-V_{sat}$. But can't take $-V_{sat}$ because two voltage level is 0 and. There 1 means $+V_{sat}$ and 0

means ground. So, ground adding on $-V_{cc}$ in opamp. That ground means when op-amp inverting voltage is greater than non-inverting than output voltage is 0.