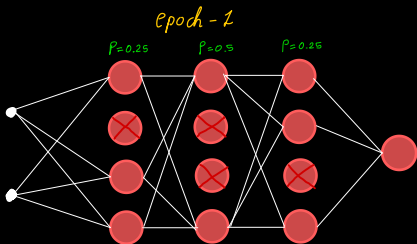
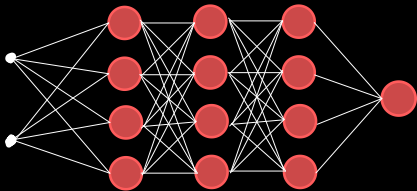
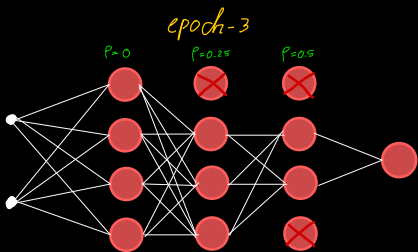
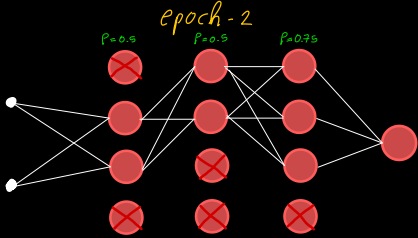


# Dropout layers

- The process of reducing overfitting in neural network.
- A technique in which we will de-activate/drop some neuron at each epochs.





→ Like this, in each epochs randomly selected new nodes will be de-activated & older de-activated/dropped nodes will be activated  
 → for each layers we can select dropout ratio ' $p$ '.

if  $P=0.5$  = 50% neurons will be dropped from this layer randomly.

→ By this technique, neurons won't focus on a single pattern. because on the next epoch, dropout pattern will be changed.

→ High  $p$  value leads to *underfitting*.

→ low  $p$  value leads to *overfitting*.

→ It is good strategy to apply dropout just after last layer.

