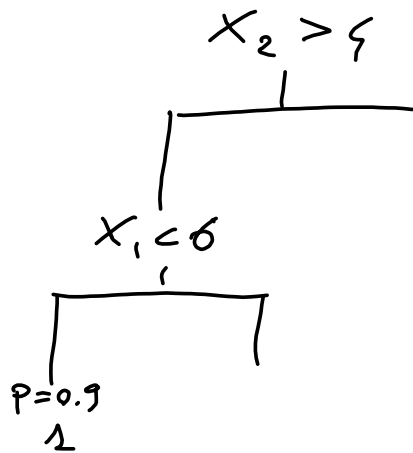
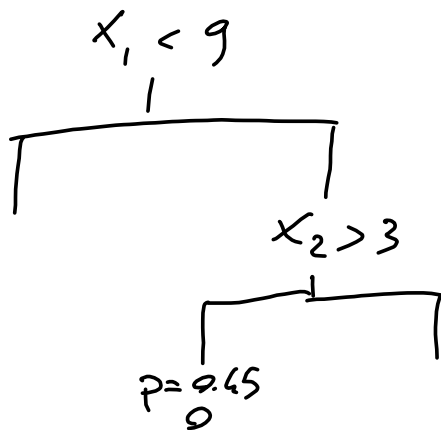


$$x^0 = (5, 5)$$

consensus

$$\hat{G}(x^0) = \text{mode} \left(\hat{G}^{[b]}(x^0) \right) \\ = \arg \max_k q_k$$

where q_k is the proportion of trees with prediction k
 single model learner

$$\hat{G}_\alpha(x^0) = \text{mode} \{0, 1, 0\} \rightarrow 0$$

probability

$$\hat{G}(x^0) = \arg \max_k B^{-1} \sum_{b=1}^B P_k^{[b]}(x^0)$$

$P_k^{[b]}$ is the probability for category k for the tree b
 model learner

$$\hat{G}_\alpha(x^0) = \begin{array}{ll} k=1 & \frac{0.9 + 0.45 + 0.15}{3} = 0.6 \\ k=0 & \frac{0.1 + 0.55 + 0.85}{3} = 0.4 \end{array} \rightarrow 1$$