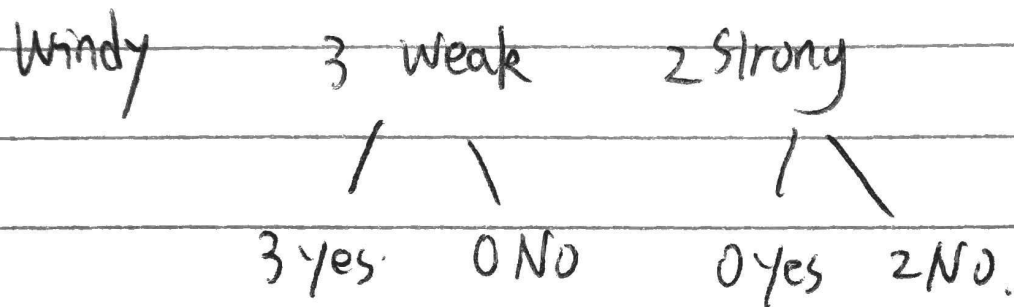


$$\begin{aligned} \text{Gain}(\text{rainy, humidity}) &= 0.971 - \left[\frac{2}{5} \left(-\frac{1}{2} \log_2 \left(\frac{1}{2} \right) - \frac{1}{2} \log_2 \left(\frac{1}{2} \right) \right) \right] - \left[\frac{3}{5} \left(-\frac{2}{3} \log_2 \left(\frac{2}{3} \right) - \frac{1}{3} \log_2 \left(\frac{1}{3} \right) \right) \right] \\ &= 0.971 - 0.951 = 0.02 \end{aligned}$$



$$\begin{aligned} \text{Gain}(\text{rainy, humidity}) &= 0.971 - \left[\frac{3}{5}(0) \right] - \left[\frac{2}{5}(0) \right] \\ &= 0.971 \end{aligned}$$

Split on Windy for the next node.