

Oberster Knoten berechnen:

outlook:

	overcast	Sunny	rainy	
Y	4	2	3	9
N	0	3	2	5
	4	5	5	

$$GINI(outlook) = \sim 0,343$$

humidity:

	high	normal	
Y	3	6	9
N	4	1	5
	7	7	

$$GINI(humidity) = 0,367$$

temperature:

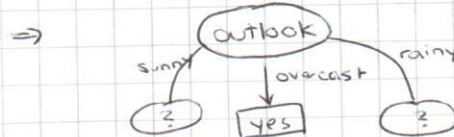
	hot	mild	cool	
Y	2	4	3	9
N	2	2	1	5
	4	6	4	

$$GINI(temperature) = 0,44$$

windy:

	FALSE	TRUE	
Y	6	3	9
N	2	3	5
	8	6	

$$GINI(windy) = 0,429$$



Für sunny: temperature | sunny

	hot	mild	cool	
Y	0	1	1	2
N	2	1	0	3
				5

$$GINI(temp|outlook=sunny) = 0,2$$

~~temp~~

Für windy: ~~temperature | windy~~ windy | sunny

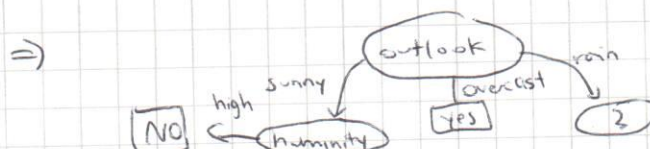
	FALSE	TRUE	
Y	1	1	2
N	2	1	3
			5

$$GINI(windy | sunny) = 0,267$$

For humidity: humidity | sunny

	high	normal	
Y	0	2	2
N	3	0	3
			5

$$GINI(humidity | sunny) = 0$$



For windy: windy | rain

	FALSE	TRUE	
Y	3	0	3
N	0	2	2
	3	2	5

$$GINI(windy | rain) = \frac{3}{5} \left(1 - \frac{3}{5} - \frac{0}{5}\right) + \frac{2}{5} \left(1 - \frac{0}{5} - \frac{2}{5}\right) = 0$$

For humidity | rain

	high	normal	
Y	1	2	3
N	1	1	2
	2	3	5

$$GINI(humidity | rain) = \frac{2}{5} \left(1 - \frac{1}{5} - \frac{1}{5}\right) + \frac{3}{5} \left(1 - \frac{2}{5} - \frac{1}{5}\right) > 0$$

For temp | rain

	hot	mild	cool	
Y	0	2	1	3
N	0	1	1	2
	0	3	2	5

$$GINI(temp | rain) = \frac{3}{5} \left(1 - \frac{2}{5} - \frac{1}{5}\right) + \frac{2}{5} \left(1 - \frac{1}{5} - \frac{1}{5}\right) > 0$$

