

| Day | Outlook | Temperature | Humidity | Wind | PlayTennis | Column1 | Column2 |
|-----|----------|-------------|----------|--------|------------|------------|----------|
| D1 | Sunny | Hot | High | Weak | No | PlayTennis | |
| D2 | Sunny | Hot | High | Strong | No | no | 5/9+5 |
| D6 | Rain | Cool | Normal | Strong | No | yes | 9/5+9 |
| D8 | Sunny | Mild | High | Weak | No | | |
| D14 | Rain | Mild | High | Strong | No | | |
| D3 | Overcast | Hot | High | Weak | Yes | Humidity | yes |
| D4 | Rain | Mild | High | Weak | Yes | Normal | 0.333333 |
| D5 | Rain | Cool | Normal | Weak | Yes | High | 0.333333 |
| D7 | Overcast | Cool | Normal | Strong | Yes | | |
| D9 | Sunny | Cool | Normal | Weak | Yes | | |
| D10 | Rain | Mild | Normal | Weak | Yes | | |
| D11 | Sunny | Mild | Normal | Strong | Yes | | |
| D12 | Overcast | Mild | High | Strong | Yes | | |
| D13 | Overcast | Hot | Normal | Weak | Yes | | |

$$P(\text{yes} | \text{Sunny}, \text{cool}, \text{High}, \text{Strong}) = P(\text{yes}) * p(\text{Sunny} | \text{Yes}) * P(\text{cool} | \text{Yes}) * P(\text{High} | \text{Yes}) * P(\text{Strong} | \text{Yes})$$

$$P(\text{no} | \text{Sunny}, \text{cool}, \text{High}, \text{Strong}) = P(\text{no}) * p(\text{Sunny} | \text{no}) * P(\text{cool} | \text{no}) * P(\text{High} | \text{no}) * P(\text{Strong} | \text{no})$$

| Column3 | outlook | yes | no | Temperatu | yes | no |
|----------|----------|----------|-----|-----------|----------|-----|
| | Sunny | 0.222222 | 0.6 | Hot | 0.22 | 0.4 |
| 0.357143 | Overcast | 0.444444 | 0 | Mild | 0.444444 | 0.4 |
| 0.642857 | Rain | 0.33 | 0.4 | Cool | 0.333333 | 0.2 |
| | | | | | | |
| no | Wind | yes | no | | | |
| 0.2 | Weak | 0.666667 | 0.4 | | | |
| 0.8 | Strong | 0.333333 | 0.6 | | | |

$P(\text{cool}|\text{yes}) * P(\text{High}|\text{Yes}) * P(\text{Strong}|\text{Yes})$ 0.005291

$\text{cool}|\text{no}) * P(\text{High}|\text{no}) * P(\text{Strong}|\text{no})$ 0.020571

$P(\text{play tennis})$ 0.204583 20%