Bayes Ingenuo

Ejemplo sobre juego de GOLF

|  | **Outlook** | **Temperature** | **Humidity** | **Windy** | **Play Golf** |
| --- | --- | --- | --- | --- | --- |
| 0 | Rainy | Hot | High | False | No |
| 1 | Rainy | Hot | High | True | No |
| 2 | Overcast | Hot | High | False | Yes |
| 3 | Sunny | Mild | High | False | Yes |
| 4 | Sunny | Cool | Normal | False | Yes |
| 5 | Sunny | Cool | Normal | True | No |
| 6 | Overcast | Cool | Normal | True | Yes |
| 7 | Rainy | Mild | High | False | No |
| 8 | Rainy | Cool | Normal | False | Yes |
| 9 | Sunny | Mild | Normal | False | Yes |
| 10 | Rainy | Mild | Normal | True | Yes |
| 11 | Overcast | Mild | High | True | Yes |
| 12 | Overcast | Hot | Normal | False | Yes |
| 13 | Sunny | Mild | High | True | No |

P(Yes) = 9/14, P(No) = 5/14

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Característica | Valor característica | Respuesta = Yes | Probabilidad  (valor | Yes) | Respuesta = No | Probabilidad  (valor | No) |
| Outlook | Rainy (5) | 2 | 2/9 | 3 | 3/5 |
|  | Overcast (4) | 4 | 4/9 | 0 | 0/5 |
|  | Sunny (5) | 3 | 3/9 | 2 | 2/5 |
| Temperatura | Hot (4) | 2 | 2/9 | 2 | 2/5 |
|  | Mild (6) | 4 | 4/9 | 2 | 2/5 |
|  | Cool (4) | 3 | 3/9 | 1 | 1/5 |
| Humidity | High (7) | 3 | 3/9 | 4 | 4/5 |
|  | Normal (7) | 6 | 6/9 | 1 | 1/5 |
| Windy | False (8) | 6 | 6/9 | 2 | 2/5 |
|  | True (6) | 3 | 3/9 | 3 | 3/5 |





P(Yes | Rainy, Hot, Normal, False) = (9/14) (2/9) (2/9) (6/9) (6/9) = 0.0141

P(No | Rainy, Hot, Normal, False) = (5/14) (3/5) (2/5) (1/5) (2/5) = 0.0068

0.0141 + 0.0068 = 0.0209 corresponde al 100%

P(Jugar Golf) = 0.0141 / 0.0209 = 0.675

P(No Jugar Golf) = 0.0068 / 0.0209 = 0.325