$20~\mathrm{MCA}201$ Data Science & Machine Learning

Tutorial 1 July 25, 2024

Solve the following problems using bayesian classification model.

1. (Outlook = Rainy, Temp= cool, humidity=High, Windy = False, Play Golf = ??)

	Outlook	Temperature	Humidity	Windy	Play Golf=Label)
1	Rainy	Hot	High	False	No
2	Rainy	Hot	High	True	No
3	Overcast	Hot	High	False	Yes
4	Sunny	Mild	High	False	Yes
5	Sunny	Cool	Normal	False	Yes
6	Sunny	Cool	Normal	True	No
7	Overcast	Cool	Normal	True	Yes
8	Rainy	Mild	High	False	No
9	Rainy	Cool	Normal	False	Yes
10	Sunny	Mild	Normal	False	Yes
11	Rainy	Mild	Normal	True	Yes
12	Overcast	Mild	High	True	Yes
13	Overcast	Hot	Normal	False	Yes
14	Sunny	Mild	High	True	No

2. (Colour = Red, Type =SUV, Origin = Imported, Stolen = ??)

	Colour	Type	Origin	Stolen=Label
1	Red	Sports	Domestic	Yes
2	Red	Sports	Domestic	No
3	Red	Sports	Domestic	Yes
4	Yellow	Sports	Domestic	No
5	Yellow	Sports	Imported	Yes
6	Yellow	SUV	Imported	No
7	Yellow	SUV	Imported	Yes
8	Yellow	SUV	Domestic	No
9	Red	SUV	Imported	No
10	Red	Sports	Imported	Yes

3. (Cough = Y, Sore Throat =N, Fever = N, Diagnosis = ??)

	Cough	Sore Throat	Fever	Diagnosis=Label
1	Y	N	Y	Flu
2	N	Y	Y	Flu
3	Y	N	N	Cold
4	Y	Y	N	Cold
5	N	N	N	Healthy