ACTU PS5841 Data Science in Finance and Insurance - Autumn 2023 (Y. Wang)
Assignment - 9
Assigned 11/9/23, Due 11/17/23

Based on the following training set,

category	quality	temperature	value
C1	B	H	86
C1	G	C	15
C1	G	H	40
C1	G	H	33
C2	B	C	25
C2	B	C	38
C2	G	H	73
C2	G	H	79
C2	G	H	28
C2	G	C	50

please code in **python** to fit the following naive-Bayes model:

- `quality`: binomial
- `temperature`: binomial
- `value`: normal

Let your code produce the posterior class probabilities for observations in the training set as follows.

	C1	C2
0	0.441662	0.558338
1	0.352087	0.647913
2	0.476693	0.523307
3	0.504540	0.495460
4	0.212574	0.787426
5	0.172271	0.827729
6	0.480247	0.519753
7	0.504801	0.495199
8	0.530537	0.469463
9	0.217274	0.782726