COMP9417 HomeWork 2

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1 Q1

1.1 Part A

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                DecisionTreeClassifier
-----------------------------------------------------------------------------------------------------
  Dataset      |   5%  |  10%  |  15%  |  20%  |  25%  |  30%  |  35%  |  40%  |  45%  |  50%  |
-----------------------------------------------------------------------------------------------------
australian     | 72.61%| 74.35%| 75.36%| 77.39%| 77.83%| 79.71%| 83.77%| 81.16%| 80.72%| 83.48%|
balance-scale  | 69.92%| 75.04%| 69.12%| 74.24%| 74.40%| 75.52%| 78.08%| 75.68%| 77.92%| 76.64%|
hypothyroid    | 94.94%| 96.31%| 97.77%| 99.18%| 99.20%| 99.42%| 99.42%| 99.52%| 99.34%| 99.20%|


                BernoulliNB with priors
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  Dataset      |   5%  |  10%  |  15%  |  20%  |  25%  |  30%  |  35%  |  40%  |  45%  |  50%  |
-----------------------------------------------------------------------------------------------------
australian     | 73.48%| 79.86%| 81.45%| 80.43%| 79.71%| 79.86%| 79.86%| 81.16%| 82.17%| 81.88%|
balance-scale  | 46.08%| 46.08%| 46.08%| 46.08%| 46.24%| 46.08%| 46.08%| 46.24%| 46.24%| 46.08%|
hypothyroid    | 91.38%| 91.81%| 92.23%| 92.23%| 92.23%| 92.26%| 92.23%| 92.23%| 92.23%| 92.23%|
```

1.2 Part B

I think (1), (2) statements are true.