

2.A:

sklearn accuracy:1.0

predictions: [0 1 0 0 0 0 2 1 1 2 1 1 2 1 0 2 1 0 2 2 1 2 2 2 1 2 0 1 0 1 0 1 2
1 1 2 1

1 1 0 2 0 0 0 0 1 1 0 2 0 1 1 2 0]

mean: {'0': array([1.37304878e+01, 1.94707317e+00, 2.44975610e+00,
1.71024390e+01,
1.06634146e+02, 2.82853659e+00, 2.94024390e+00, 3.01707317e-01,
1.85121951e+00, 5.56780488e+00, 1.05097561e+00, 3.08853659e+00,
1.11280488e+03]), '1': array([1.22424e+01, 1.96260e+00, 2.23280e+00,
2.05240e+01, 9.51400e+01,
2.25360e+00, 2.04680e+00, 3.50800e-01, 1.71220e+00, 2.96080e+00,
1.05892e+00, 2.80220e+00, 5.31260e+02]), '2': array([1.30745455e+01,
3.20090909e+00, 2.45424242e+00, 2.15606061e+01,
9.92727273e+01, 1.68757576e+00, 7.87575758e-01, 4.46363636e-01,
1.13878788e+00, 7.36272724e+00, 6.73030303e-01, 1.69060606e+00,
6.24393939e+02])}}

variance: {'0': array([2.02950982e-01, 3.95762165e-01, 6.05975015e-02,
7.29535990e+00,
1.16280785e+02, 1.14880785e-01, 1.37626770e-01, 5.39464604e-03,
1.46386318e-01, 1.48304152e+00, 1.26624628e-02, 1.08866151e-01,
3.97256692e+04]), '1': array([2.70046240e-01, 1.10783524e+00,
7.88841600e-02, 1.05854240e+01,
3.47600400e+02, 2.97211040e-01, 3.66681760e-01, 1.23193600e-02,
3.59241160e-01, 7.50035360e-01, 3.96851536e-02, 2.28521160e-01,
2.57562324e+04]), '2': array([2.61655096e-01, 8.79135537e-01,
3.18062443e-02, 4.78420569e+00,
1.02865014e+02, 1.47394123e-01, 1.02339578e-01, 1.45322314e-02,
2.12774288e-01, 5.87018938e+00, 1.39726354e-02, 8.49269054e-02,
1.35632691e+04])}}

priors: {'0': 0.33064516129032256, '1': 0.4032258064516129, '2':
0.2661290322580645}

Accuracy

1.0

Confusion Matrix

[[18 0 0]
[0 21 0]
[0 0 15]]

2.B)

```
mean: {'0': array([1.37304878e+01, 1.94707317e+00, 2.44975610e+00,
1.71024390e+01,
        1.06634146e+02, 2.82853659e+00, 2.94024390e+00, 3.01707317e-01,
        1.85121951e+00, 5.56780488e+00, 1.05097561e+00, 3.08853659e+00,
        1.11280488e+03]), '1': array([1.22424e+01, 1.96260e+00, 2.23280e+00,
2.05240e+01, 9.51400e+01,
        2.25360e+00, 2.04680e+00, 3.50800e-01, 1.71220e+00, 2.96080e+00,
        1.05892e+00, 2.80220e+00, 5.31260e+02]), '2': array([1.30745455e+01,
3.20090909e+00, 2.45424242e+00, 2.15606061e+01,
        9.92727273e+01, 1.68757576e+00, 7.87575758e-01, 4.46363636e-01,
        1.13878788e+00, 7.36272724e+00, 6.73030303e-01, 1.69060606e+00,
        6.24393939e+02])}]}
```

```
variance: {'0': array([2.02950982e-01, 3.95762165e-01, 6.05975015e-02,
7.29535990e+00,
        1.16280785e+02, 1.14880785e-01, 1.37626770e-01, 5.39464604e-03,
        1.46386318e-01, 1.48304152e+00, 1.26624628e-02, 1.08866151e-01,
        3.97256692e+04]), '1': array([2.70046240e-01, 1.10783524e+00,
7.88841600e-02, 1.05854240e+01,
        3.47600400e+02, 2.97211040e-01, 3.66681760e-01, 1.23193600e-02,
        3.59241160e-01, 7.50035360e-01, 3.96851536e-02, 2.28521160e-01,
        2.57562324e+04]), '2': array([2.61655096e-01, 8.79135537e-01,
3.18062443e-02, 4.78420569e+00,
        1.02865014e+02, 1.47394123e-01, 1.02339578e-01, 1.45322314e-02,
        2.12774288e-01, 5.87018938e+00, 1.39726354e-02, 8.49269054e-02,
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        1.06634146e+02, 2.82853659e+00, 2.94024390e+00, 3.01707317e-01,
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2.05240e+01, 9.51400e+01,
2.25360e+00, 2.04680e+00, 3.50800e-01, 1.71220e+00, 2.96080e+00,
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6.24393939e+02])}]}
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