

BayesianSimulatedData2

March 3, 2025

```
[1]: from src.utils.TestHelper import TestHelper
```

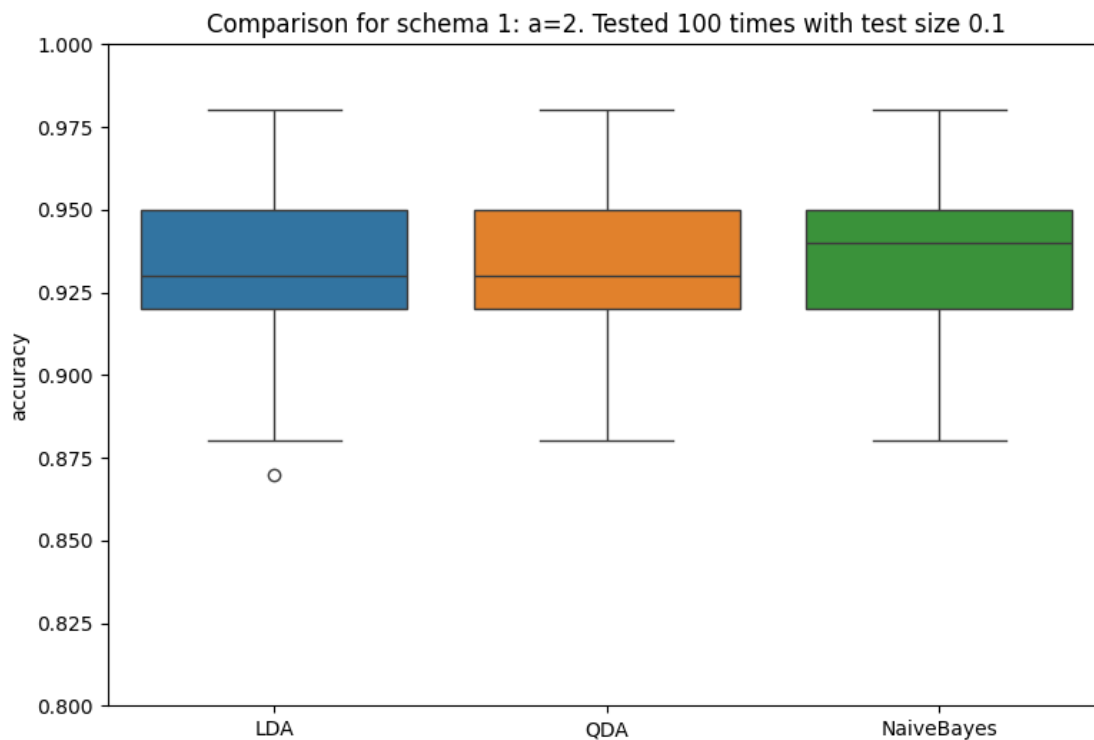
```
[2]: tester = TestHelper()  
a = 2  
rho = [0, 0.1, 0.3, 0.5, 0.7, 0.9]  
test_sizes = [0.1, 0.2, 0.3, 0.4]
```

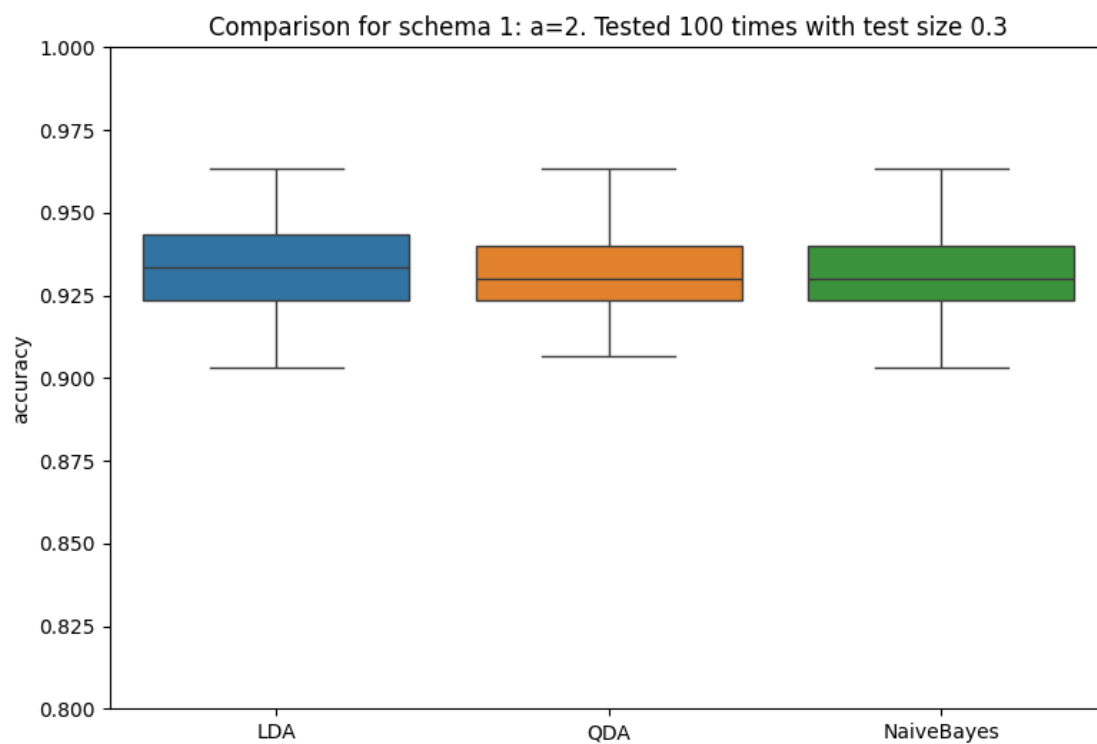
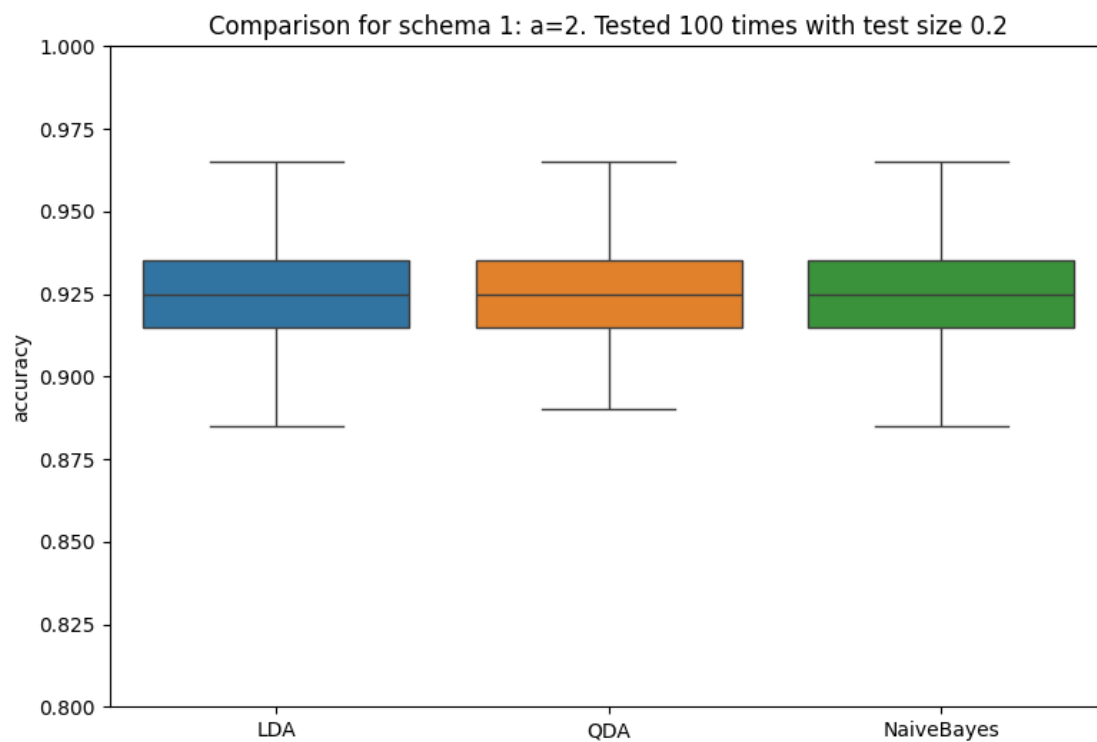
1 1. Experiment - test sizes for selected value rho

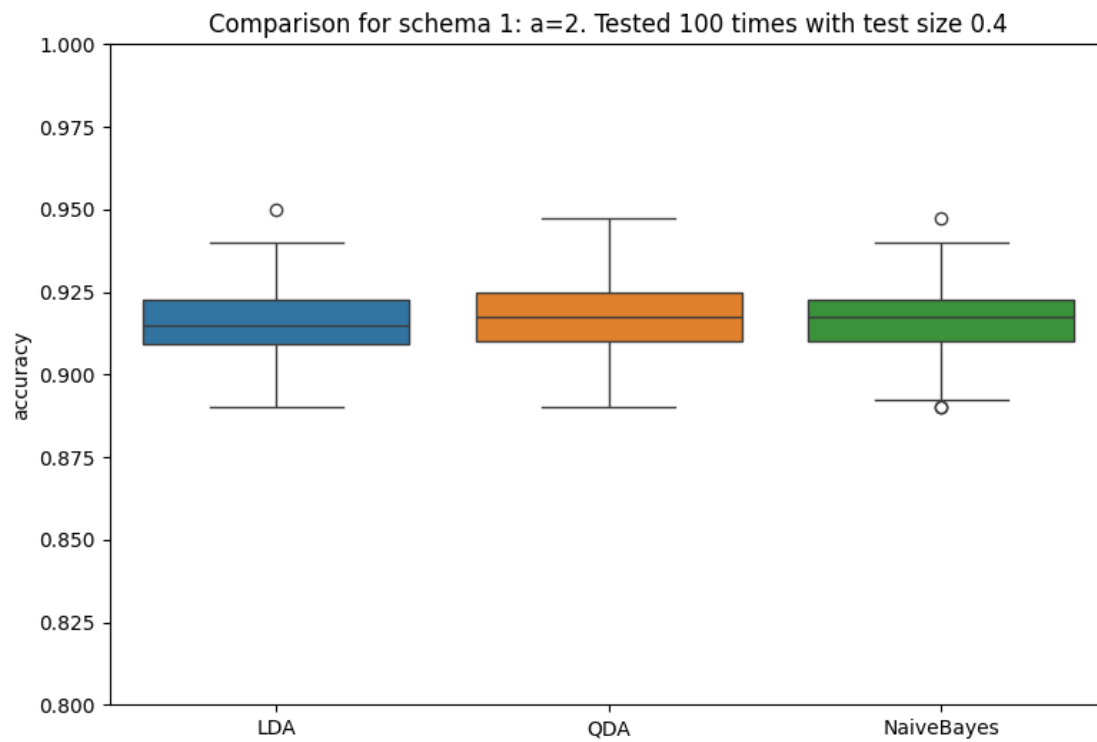
```
[3]: tester.ylim = (0.8,1)
```

1.1 Schema 1

```
[4]: for test_size in test_sizes:  
    tester.test_scheme_1(a, 100, test_size)
```

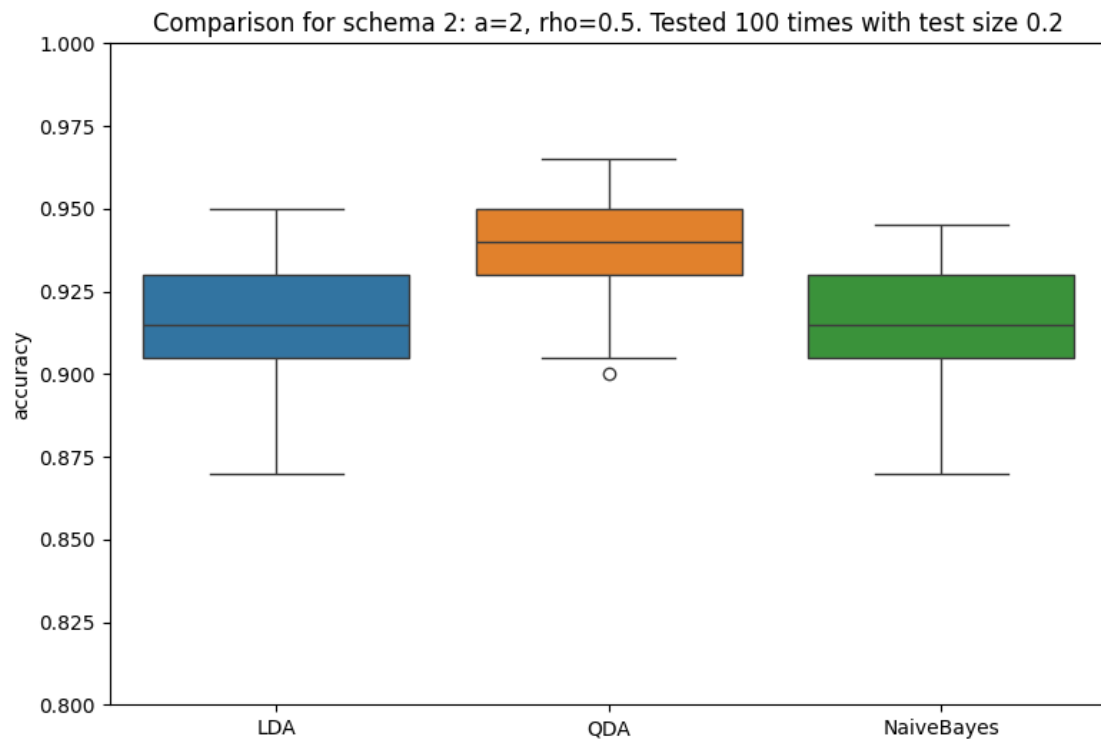
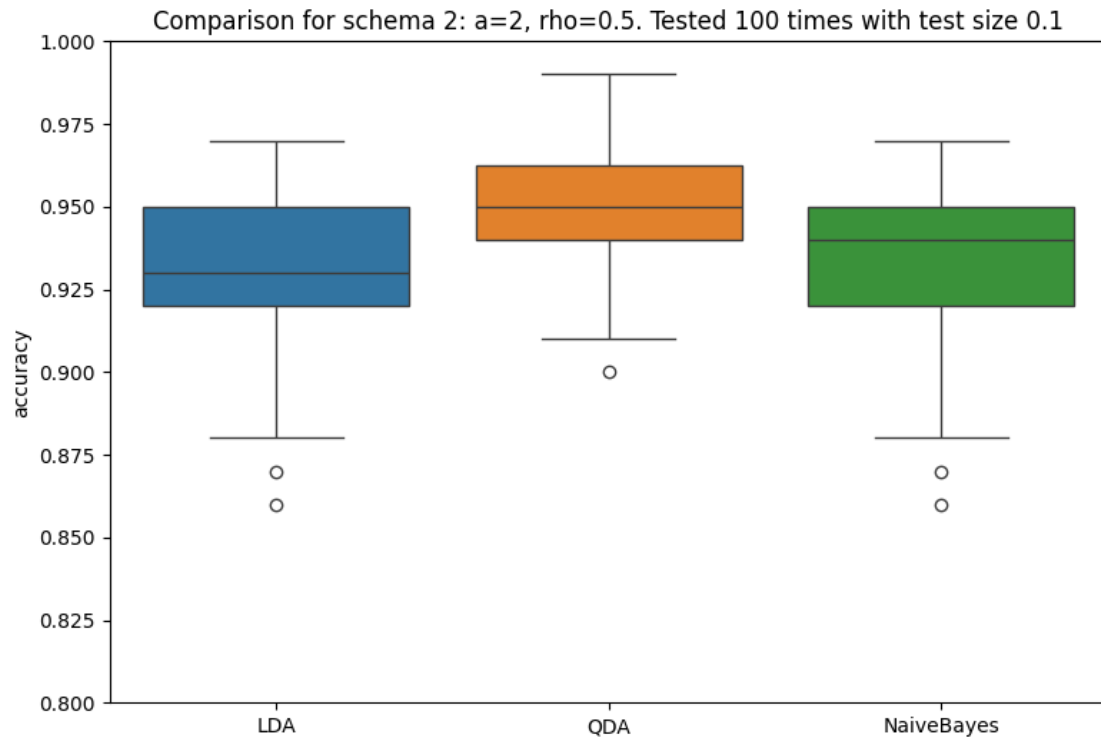


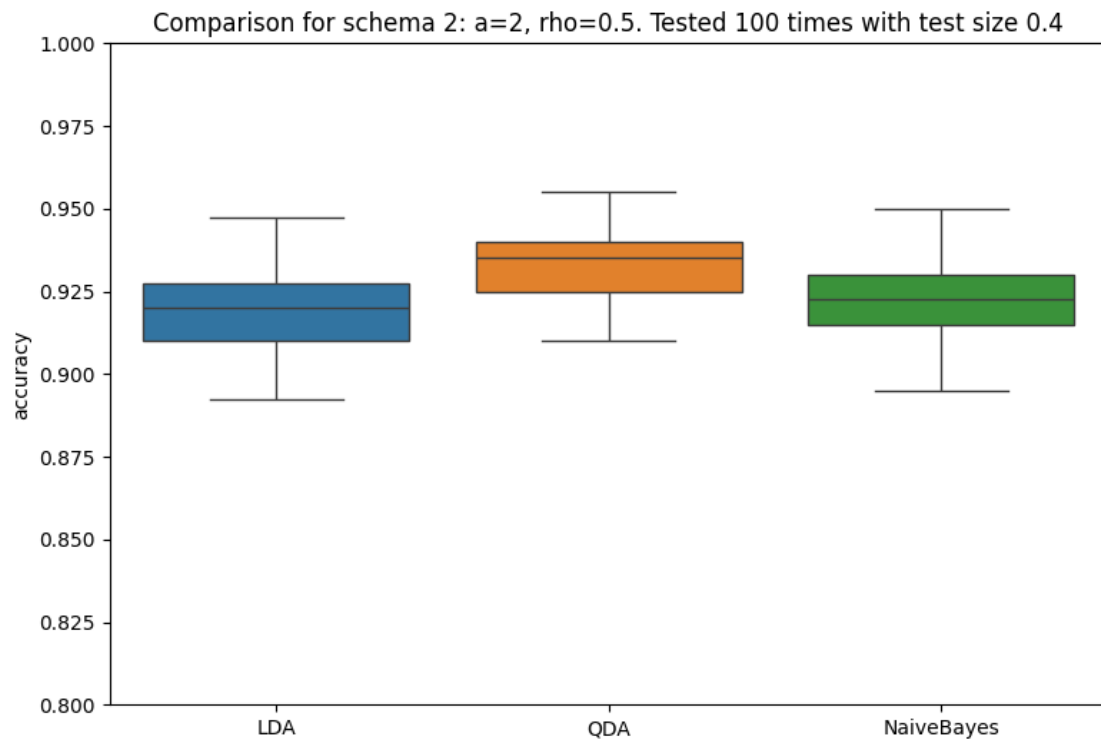
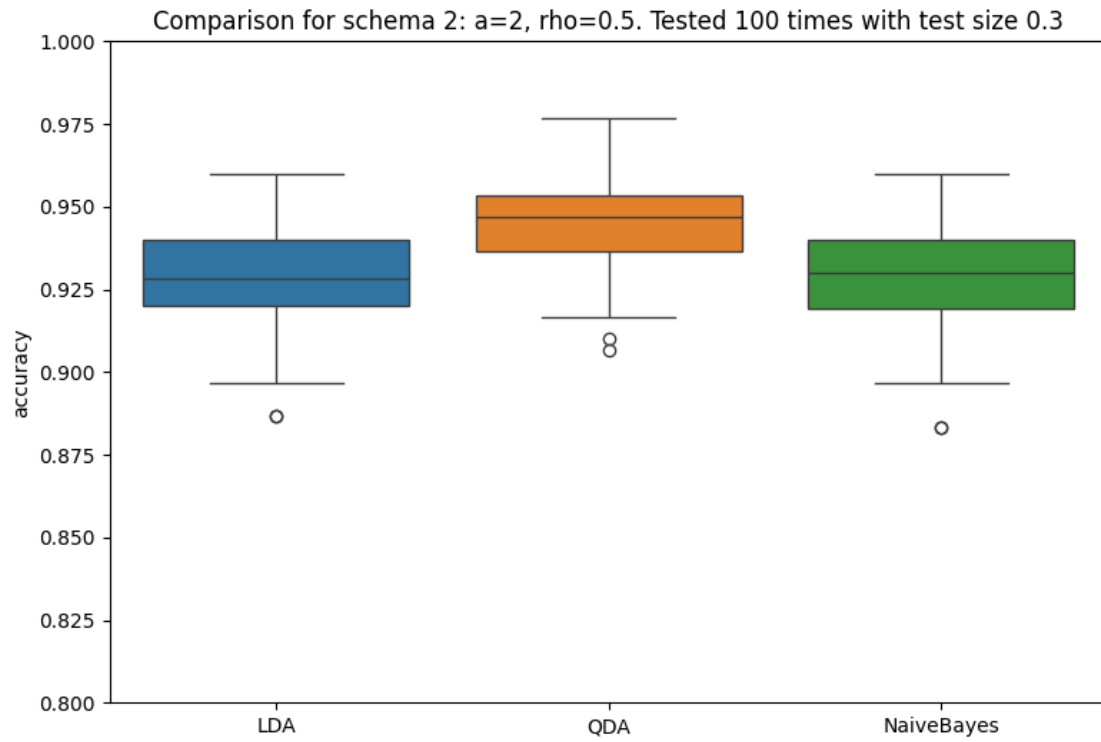




1.2 Schema 2

```
[5]: for test_size in test_sizes:  
      tester.test_scheme_2(a, 0.5, 100, test_size)
```





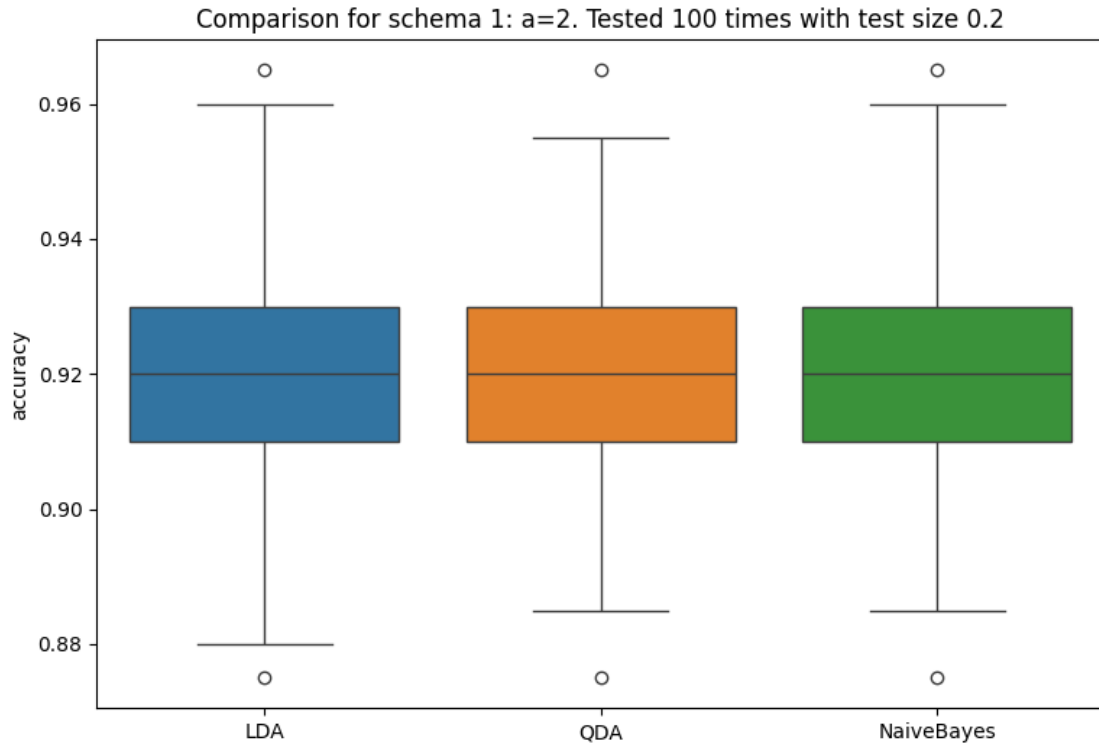
1.2.1 Key observations

2. Experiment - different values a

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[6]: tester.ylim = None
```

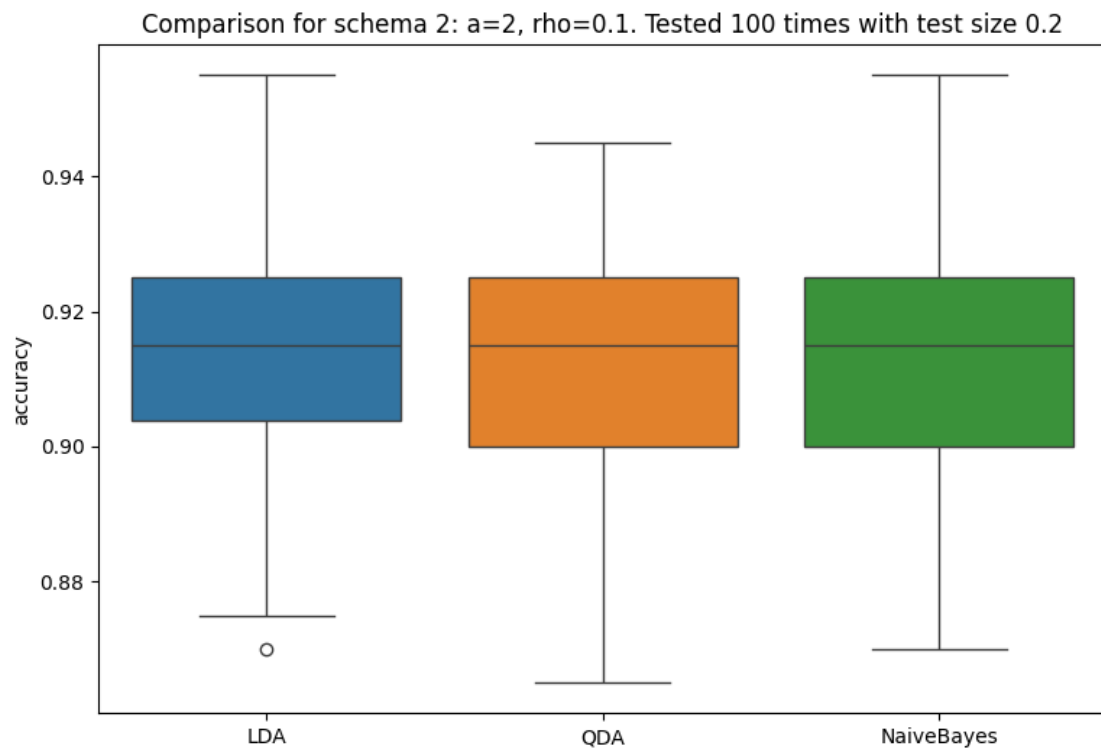
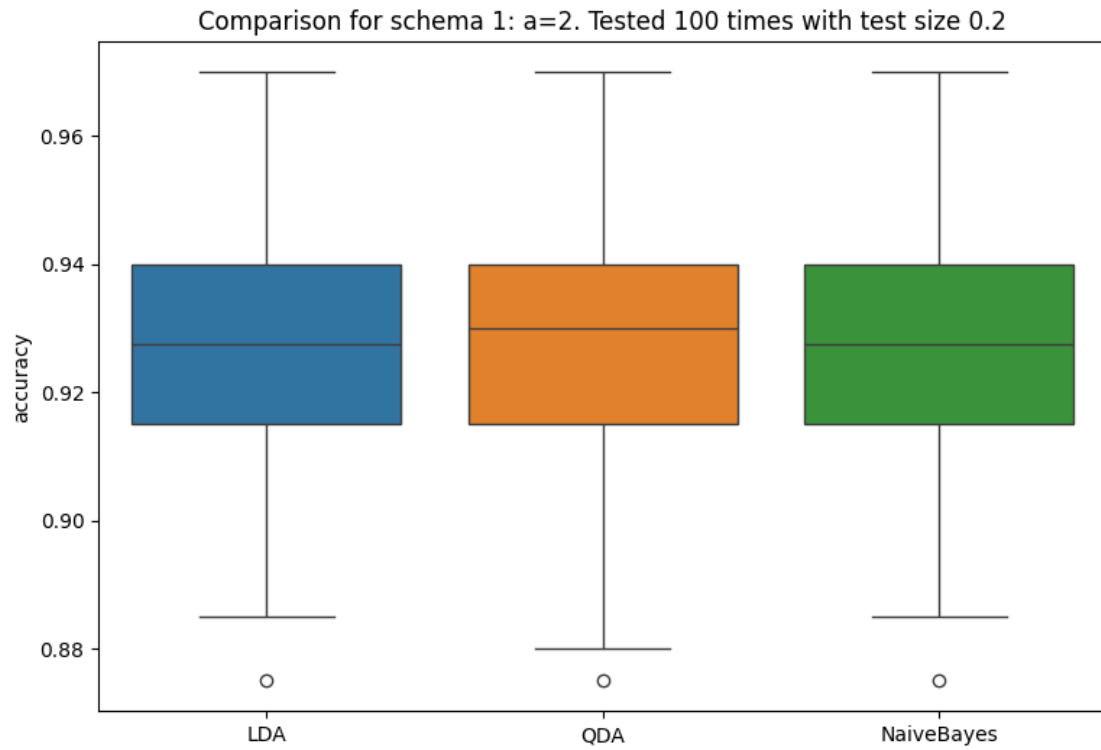
2.1 Schema 1

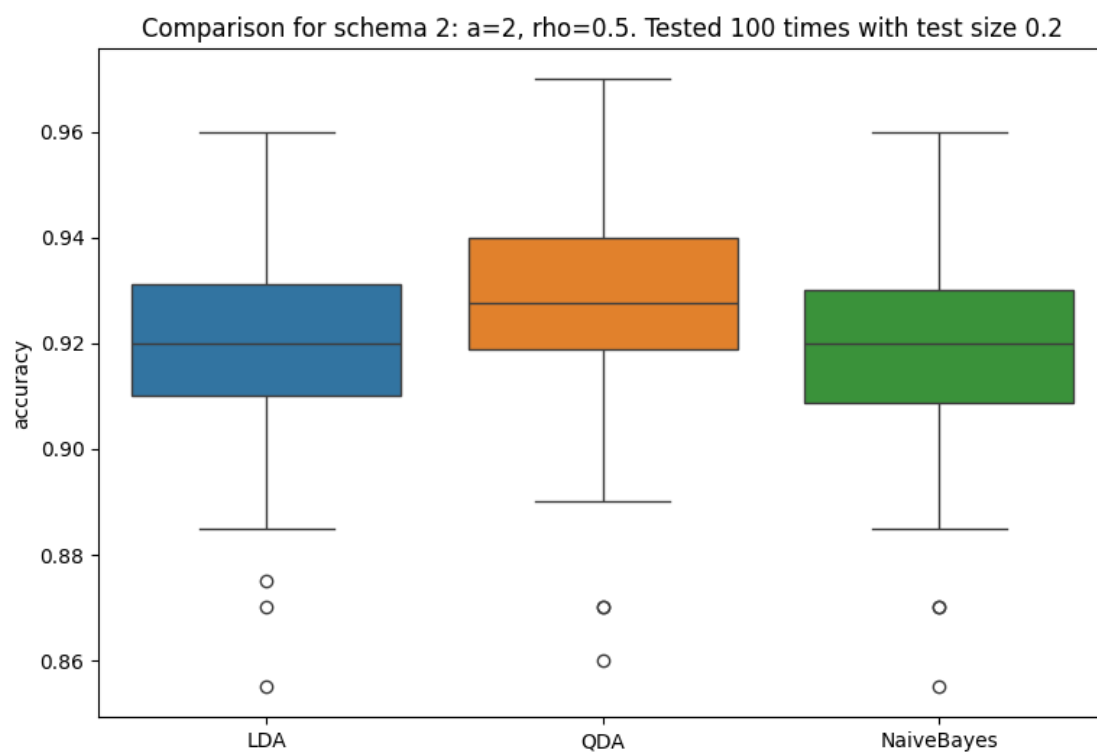
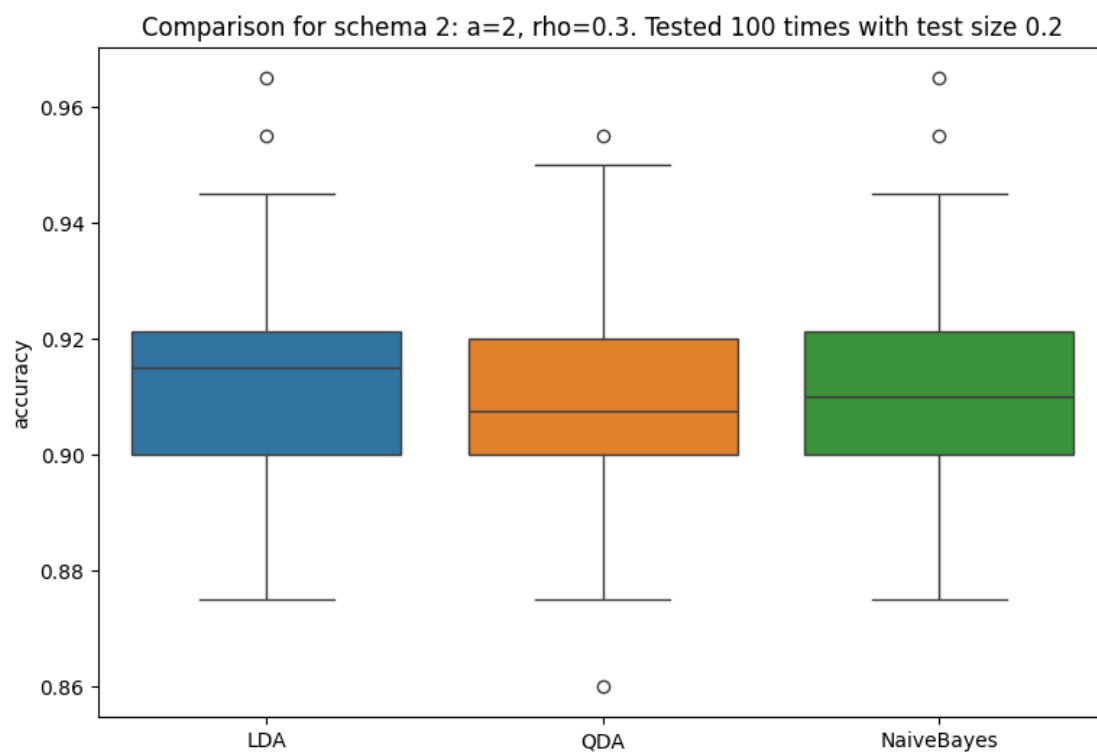
```
[7]: tester.test_scheme_1(a, 100)
```

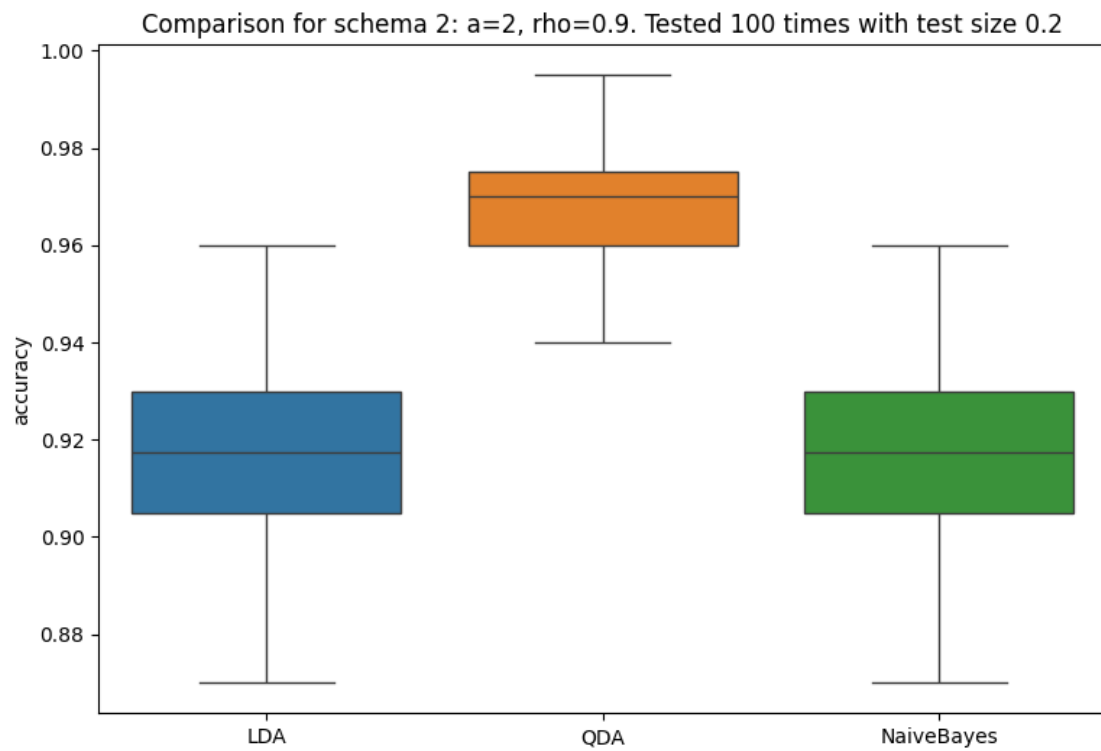
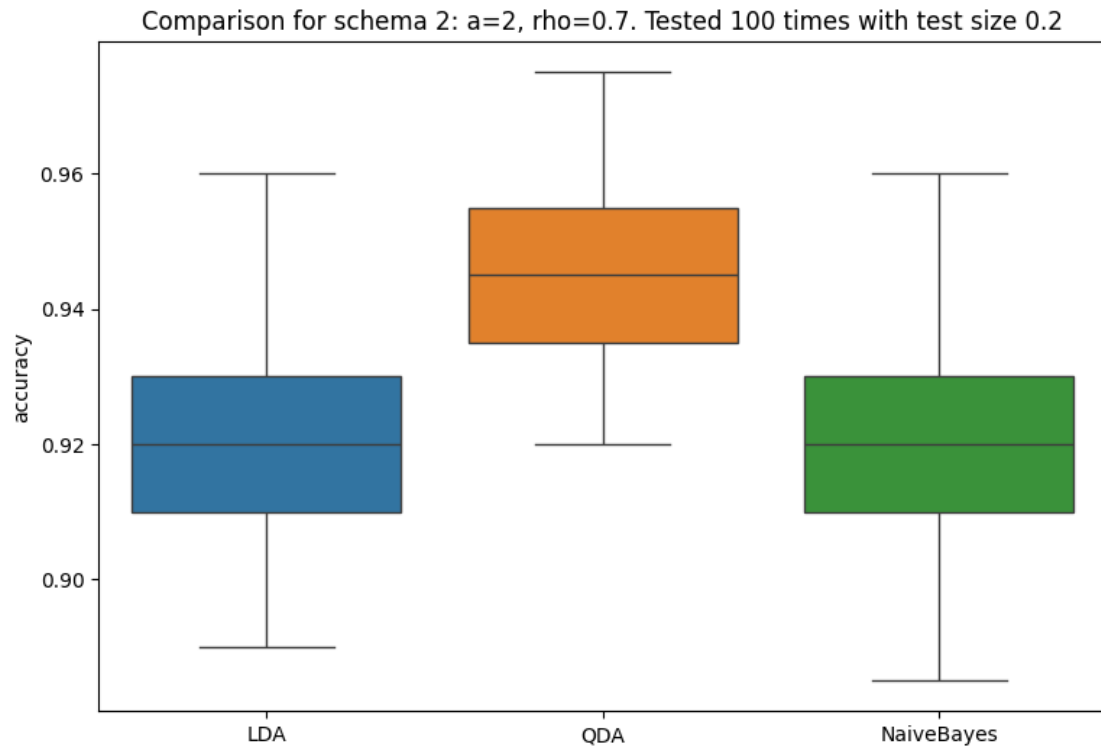


2.2 Scheme 2

```
[8]: for rho_i in rho:  
      tester.test_scheme_2(a, rho_i, 100)
```







2.2.1 Key observations