

(3) (15 points) Properly analyze the classifiers behavior by applying the knowledge that we discussed in class. Such analysis should include at least accuracy and running time.

For perceptron classifier, the least accuracy is 0.937037037037037, so approximate 93.7%. And the running time is 0.01558375358581543 millisecond.

For support vector machine classifier linear, the least accuracy is 0.9777777777777777, so approximate 97.7%. And the running time is 0.031246662139892578 millisecond.

For support vector machine classifier non-linear, the least accuracy is 0.9796296296296296, so approximate 97.9%. And the running time is 0.09516310691833496 millisecond.

For decision tree classifier, the least accuracy is 0.8203703703703704, so approximate 82.0%. And the running time is 0.015572309494018555 millisecond.

Also, each time I ran the program, the accuracy is very stable, but the running time changes.