Python: 3.8.8 (default, Feb 24 2021, 15:54:32) [MSC v.1928 64 bit (AMD64)]

scipy: 1.7.1

numpy: 1.19.2

pandas: 1.1.3

sklearn: 0.24.2

Hello World!

Number of samples in fold1:75

Number of samples in fold2:75

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Part 1

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Number of mislabeled points out of a total 150 points : 3

Accuracy of the Support Vector Machines - Linear SVC model: 0.980000

Confusion Matrix:

[[50 0 0]

 [0 48 2]

 [0 1 49]]

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Part 2 - Principal component analysis

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Eigen Vectors:

[[0.36158968 -0.65653988 -0.58099728 0.31725455]

 [-0.08226889 -0.72971237 0.59641809 -0.32409435]

 [0.85657211 0.1757674   0.07252408 -0.47971899]

 [0.35884393 0.07470647 0.54906091 0.75112056]]

Eigen Values:

[4.22484077 0.24224357 0.07852391 0.02368303]

Sum: 4.5692912751677826

Proportion of Variance (PoV) 0.9279898839113292

Number of mislabeled points out of a total 150 points : 13

Accuracy of the Support Vector Machines - Linear SVC model: 0.913333

Confusion Matrix:

[[50 0 0]

 [0 44 6]

 [0 7 43]]

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Part 3 - Simulated annaling
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Iteration: 0

Accepted Features: ['sepal-width-pca', 'petal-width', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'petal-length']

Accuracy: 0.9733333333333334

Pr[accept]: 0

Random uniform: 0

Status: Improved

Iteration: 1

Accepted Features: ['sepal-width', 'sepal-width-pca', 'sepal-length', 'petal-width', 'petal-length']

Accuracy: 0.9866666666666667

Pr[accept]: 0

Random uniform: 0

Status: Improved

Iteration: 2

Accepted Features: ['sepal-width', 'sepal-width-pca', 'sepal-length', 'petal-width', 'petal-length', 'sepal-length-pca', 'petal-length-pca']

Accuracy: 0.9733333333333334

Pr[accept]: 0.9733349348192527

Random uniform: 0.6009941577756978

Status: Accept

Iteration: 3

Accepted Features: ['sepal-width', 'sepal-width-pca', 'sepal-length', 'petal-width', 'petal-length', 'sepal-length-pca', 'petal-length-pca', 'petal-width-pca']

Accuracy: 0.98

Pr[accept]: 0.9733349348192527

Random uniform: 0.6009941577756978

Status: Improved

Iteration: 4

Accepted Features: ['petal-width-pca', 'petal-width', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-length']

Accuracy: 0.98

Pr[accept]: 1.0

Random uniform: 0.11833987407658075

Status: Accept

Iteration: 5

Accepted Features: ['sepal-width', 'petal-width-pca', 'petal-width', 'sepal-width-pca', 'petal-length']

Accuracy: 0.9733333333333334

Pr[accept]: 0.9665583540942505

Random uniform: 0.9056519400010324

Status: Accept

Iteration: 6

Accepted Features: ['sepal-width', 'petal-width-pca', 'petal-width', 'sepal-width-pca', 'petal-length']

Accuracy: 0.5866666666666667

Pr[accept]: 0.09222153163641231

Random uniform: 0.643760505503637

Status: Reject

Iteration: 7

Accepted Features: ['sepal-width', 'petal-width-pca', 'petal-width', 'sepal-width-pca', 'petal-length', 'sepal-length-pca']

Accuracy: 0.9666666666666667

Pr[accept]: 0.09222153163641231

Random uniform: 0.643760505503637

Status: Improved

Iteration: 8

Accepted Features: ['sepal-width', 'petal-width-pca', 'sepal-length-pca', 'petal-width', 'sepal-width-pca', 'petal-length']

Accuracy: 0.9666666666666667

Pr[accept]: 1.0

Random uniform: 0.5322284569362262

Status: Accept

Iteration: 9

Accepted Features: ['sepal-width', 'petal-width-pca', 'sepal-length-pca', 'petal-width', 'sepal-width-pca', 'petal-length', 'sepal-length']

Accuracy: 0.98

Pr[accept]: 1.0

Random uniform: 0.5322284569362262

Status: Improved

Iteration: 10

Accepted Features: ['petal-width-pca', 'sepal-length-pca', 'sepal-length', 'petal-width', 'sepal-width-pca', 'petal-length']

Accuracy: 0.9733333333333334

Pr[accept]: 0.9342350518693866

Random uniform: 0.7304320559309804

Status: Accept

Iteration: 11

Accepted Features: ['sepal-width', 'sepal-width-pca', 'sepal-length', 'petal-width', 'petal-length']

Accuracy: 0.9866666666666667

Pr[accept]: 0.9342350518693866

Random uniform: 0.7304320559309804

Status: Restart

Iteration: 12

Accepted Features: ['sepal-width', 'sepal-length', 'petal-width', 'sepal-width-pca', 'petal-length']

Accuracy: 0.9866666666666667

Pr[accept]: 1.0

Random uniform: 0.14891345191752503

Status: Accept

Iteration: 13

Accepted Features: ['sepal-width', 'petal-width', 'sepal-width-pca']

Accuracy: 0.9666666666666667

Pr[accept]: 0.7683472392982708

Random uniform: 0.5642917324365946

Status: Accept

Iteration: 14

Accepted Features: ['sepal-width', 'petal-width', 'sepal-width-pca', 'sepal-length']

Accuracy: 0.9666666666666667

Pr[accept]: 1.0

Random uniform: 0.23834668738468

Status: Accept

Iteration: 15

Accepted Features: ['sepal-width', 'petal-width', 'sepal-width-pca', 'sepal-length', 'petal-width-pca', 'sepal-length-pca']

Accuracy: 0.98

Pr[accept]: 1.0

Random uniform: 0.23834668738468

Status: Improved

Iteration: 16

Accepted Features: ['sepal-width', 'petal-width-pca', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca']

Accuracy: 0.98

Pr[accept]: 1.0

Random uniform: 0.7032062816689787

Status: Accept

Iteration: 17

Accepted Features: ['sepal-width', 'petal-width-pca', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-length-pca']

Accuracy: 0.98

Pr[accept]: 1.0

Random uniform: 0.9844681370463386

Status: Accept

Iteration: 18

Accepted Features: ['sepal-width', 'petal-width-pca', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-length-pca', 'petal-width', 'petal-length']

Accuracy: 0.98

Pr[accept]: 1.0

Random uniform: 0.369921268731625

Status: Accept

Iteration: 19

Accepted Features: ['petal-width', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-length']

Accuracy: 0.9733333333333334

Pr[accept]: 0.8787527550411002

Random uniform: 0.4842077935759399

Status: Accept

Iteration: 20

Accepted Features: ['petal-width', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-length', 'petal-width-pca']

Accuracy: 0.98

Pr[accept]: 0.8787527550411002

Random uniform: 0.4842077935759399

Status: Improved

Iteration: 21

Accepted Features: ['sepal-width', 'sepal-width-pca', 'sepal-length', 'petal-width', 'petal-length']

Accuracy: 0.9866666666666667

Pr[accept]: 1.0

Random uniform: 0.35845000896898793

Status: Restart

Iteration: 22

Accepted Features: ['sepal-width', 'sepal-width-pca', 'sepal-length', 'petal-width', 'petal-length', 'petal-width-pca', 'petal-length-pca']

Accuracy: 0.98

Pr[accept]: 0.8618718815573825

Random uniform: 0.8078965727958438

Status: Accept

Iteration: 23

Accepted Features: ['sepal-width', 'sepal-width-pca', 'sepal-length', 'petal-width', 'petal-length', 'petal-width-pca', 'petal-length-pca', 'sepal-length-pca']

Accuracy: 0.98

Pr[accept]: 1.0

Random uniform: 0.6614699378267465

Status: Accept

Iteration: 24

Accepted Features: ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-width-pca', 'petal-length']

Accuracy: 0.98

Pr[accept]: 1.0

Random uniform: 0.3302262465006659

Status: Accept

Iteration: 25

Accepted Features: ['sepal-width', 'petal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'petal-length']

Accuracy: 0.9733333333333334

Pr[accept]: 0.843607426384061

Random uniform: 0.008179323051907383

Status: Accept

Iteration: 26

Accepted Features: ['sepal-width', 'petal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'petal-length']

Accuracy: 0.9333333333333333

Pr[accept]: 0.3435257691806005

Random uniform: 0.5735798098271611

Status: Reject

Iteration: 27

Accepted Features: ['sepal-width', 'petal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'petal-length', 'sepal-length']

Accuracy: 0.9733333333333334

Pr[accept]: 0.3435257691806005

Random uniform: 0.5735798098271611

Status: Improved

Iteration: 28

Accepted Features: ['sepal-width', 'petal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'petal-length', 'sepal-length', 'sepal-width-pca']

Accuracy: 0.98

Pr[accept]: 0.3435257691806005

Random uniform: 0.5735798098271611

Status: Improved

Iteration: 29

Accepted Features: ['sepal-width', 'petal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'sepal-width-pca', 'petal-length']

Accuracy: 0.98

Pr[accept]: 1.0

Random uniform: 0.9715081614761621

Status: Accept

Iteration: 30

Accepted Features: ['sepal-width', 'sepal-width-pca', 'petal-width-pca', 'petal-length-pca', 'petal-length']

Accuracy: 0.9733333333333334

Pr[accept]: 0.8153958055474646

Random uniform: 0.5790460023796662

Status: Accept

Iteration: 31

Accepted Features: ['sepal-width', 'sepal-width-pca', 'sepal-length', 'petal-width', 'petal-length']

Accuracy: 0.9866666666666667

Pr[accept]: 1.0

Random uniform: 0.9804446881446885

Status: Restart

Iteration: 32

Accepted Features: ['sepal-width', 'sepal-width-pca', 'sepal-length', 'petal-width', 'petal-length', 'petal-width-pca']

Accuracy: 0.98

Pr[accept]: 0.8055611076677203

Random uniform: 0.4557433961975197

Status: Accept

Iteration: 33

Accepted Features: ['sepal-width', 'petal-width-pca', 'sepal-length', 'petal-width', 'petal-length']

Accuracy: 0.9733333333333334

Pr[accept]: 0.7989237289412789

Random uniform: 0.07391049123659665

Status: Accept

Iteration: 34

Accepted Features: ['sepal-width', 'petal-width-pca', 'sepal-length', 'petal-width', 'petal-length', 'sepal-width-pca', 'sepal-length-pca']

Accuracy: 0.98

Pr[accept]: 0.7989237289412789

Random uniform: 0.07391049123659665

Status: Improved

Iteration: 35

Accepted Features: ['sepal-width', 'petal-width-pca', 'sepal-length-pca', 'sepal-length', 'petal-width', 'petal-length']

Accuracy: 0.98

Pr[accept]: 1.0

Random uniform: 0.0890804643175449

Status: Accept

Iteration: 36

Accepted Features: ['sepal-width', 'petal-width-pca', 'sepal-length-pca', 'sepal-length', 'petal-width', 'petal-length', 'sepal-width-pca', 'petal-length-pca']

Accuracy: 0.98

Pr[accept]: 1.0

Random uniform: 0.7243906856118403

Status: Accept

Iteration: 37

Accepted Features: ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'petal-length']

Accuracy: 0.9733333333333334

Pr[accept]: 0.7774774175734975

Random uniform: 0.5626237390542221

Status: Accept

Iteration: 38

Accepted Features: ['sepal-width', 'petal-width-pca', 'sepal-length-pca', 'sepal-length', 'petal-length']

Accuracy: 0.9733333333333334

Pr[accept]: 1.0

Random uniform: 0.9454228772170507

Status: Accept

Iteration: 39

Accepted Features: ['sepal-width', 'petal-width-pca', 'sepal-length-pca', 'sepal-length', 'petal-length', 'petal-length-pca', 'sepal-width-pca']

Accuracy: 0.98

Pr[accept]: 1.0

Random uniform: 0.9454228772170507

Status: Improved

Iteration: 40

Accepted Features: ['sepal-width', 'sepal-length-pca', 'petal-length-pca', 'sepal-length', 'sepal-width-pca']

Accuracy: 0.98

Pr[accept]: 1.0

Random uniform: 0.5350581643581591

Status: Accept

Iteration: 41

Accepted Features: ['sepal-width', 'sepal-width-pca', 'sepal-length', 'petal-width', 'petal-length']

Accuracy: 0.9866666666666667

Pr[accept]: 0.7566068110629162

Random uniform: 0.908010196970101

Status: Restart

Iteration: 42

Accepted Features: ['sepal-width', 'sepal-width-pca', 'sepal-length', 'petal-width', 'petal-length', 'petal-width-pca']

Accuracy: 0.98

Pr[accept]: 0.7529294226587894

Random uniform: 0.7070750369926049

Status: Accept

Iteration: 43

Accepted Features: ['sepal-width', 'sepal-width-pca', 'sepal-length', 'petal-width', 'petal-length', 'petal-width-pca']

Accuracy: 0.9666666666666667

Pr[accept]: 0.5570869129554625

Random uniform: 0.6811788730380254

Status: Reject

Iteration: 44

Accepted Features: ['sepal-width', 'petal-width-pca', 'sepal-length', 'petal-width', 'sepal-width-pca', 'petal-length']

Accuracy: 0.98

Pr[accept]: 0.5570869129554625

Random uniform: 0.6811788730380254

Status: Improved

Iteration: 45

Accepted Features: ['petal-width-pca', 'sepal-length', 'petal-width', 'petal-length']

Accuracy: 0.98

Pr[accept]: 1.0

Random uniform: 0.15157237655609013

Status: Accept

Iteration: 46

Accepted Features: ['petal-width', 'petal-width-pca', 'petal-length', 'sepal-length']

Accuracy: 0.98

Pr[accept]: 1.0

Random uniform: 0.5339851573574577

Status: Accept

Iteration: 47

Accepted Features: ['petal-width', 'petal-width-pca', 'petal-length', 'sepal-length', 'sepal-width']

Accuracy: 0.9733333333333334

Pr[accept]: 0.7263466555340532

Random uniform: 0.5070147024280913

Status: Accept

Iteration: 48

Accepted Features: ['petal-width', 'petal-width-pca', 'petal-length', 'sepal-length', 'sepal-width']

Accuracy: 0.74

Pr[accept]: 1.0060946471455792e-05

Random uniform: 0.7675376411204209

Status: Reject

Iteration: 49

Accepted Features: ['petal-width', 'petal-width-pca', 'petal-length', 'sepal-length', 'sepal-width', 'sepal-width-pca']

Accuracy: 0.98

Pr[accept]: 1.0060946471455792e-05

Random uniform: 0.7675376411204209

Status: Improved

Iteration: 50

Accepted Features: ['petal-width', 'petal-width-pca', 'petal-length', 'sepal-length', 'sepal-width', 'sepal-width-pca', 'petal-length-pca']

Accuracy: 0.98

Pr[accept]: 1.0

Random uniform: 0.7287609739176862

Status: Accept

Iteration: 51

Accepted Features: ['sepal-width', 'sepal-width-pca', 'sepal-length', 'petal-width', 'petal-length']

Accuracy: 0.9866666666666667

Pr[accept]: 1.0

Random uniform: 0.0707812366395083

Status: Restart

Iteration: 52

Accepted Features: ['sepal-width', 'sepal-width-pca', 'sepal-length', 'petal-width', 'petal-length', 'sepal-length-pca', 'petal-width-pca']

Accuracy: 0.98

Pr[accept]: 0.7037364516598972

Random uniform: 0.03558639608271408

Status: Accept

Iteration: 53

Accepted Features: ['sepal-width', 'sepal-width-pca', 'sepal-length', 'petal-width', 'petal-length', 'sepal-length-pca', 'petal-width-pca', 'petal-length-pca']

Accuracy: 0.98

Pr[accept]: 1.0

Random uniform: 0.4565961114093897

Status: Accept

Iteration: 54

Accepted Features: ['petal-width-pca', 'petal-width', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-width-pca', 'petal-length']

Accuracy: 0.98

Pr[accept]: 1.0

Random uniform: 0.02590015570632087

Status: Accept

Iteration: 55

Accepted Features: ['petal-width-pca', 'petal-width', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-width-pca', 'petal-length', 'sepal-length']

Accuracy: 0.98

Pr[accept]: 1.0

Random uniform: 0.9468294599773205

Status: Accept

Iteration: 56

Accepted Features: ['petal-width-pca', 'petal-width', 'petal-length-pca', 'sepal-width', 'sepal-length', 'sepal-width-pca']

Accuracy: 0.96

Pr[accept]: 0.3189065573239701

Random uniform: 0.13042421676349303

Status: Accept

Iteration: 57

Accepted Features: ['sepal-width', 'sepal-width-pca', 'sepal-length', 'petal-length-pca']

Accuracy: 0.96

Pr[accept]: 1.0

Random uniform: 0.5591470311408181

Status: Accept

Iteration: 58

Accepted Features: ['sepal-width', 'sepal-width-pca', 'sepal-length', 'petal-length-pca', 'petal-width-pca', 'petal-width']

Accuracy: 0.96

Pr[accept]: 1.0

Random uniform: 0.6841755156681438

Status: Accept

Iteration: 59

Accepted Features: ['sepal-width', 'sepal-width-pca', 'sepal-length', 'petal-length-pca', 'petal-width-pca', 'petal-width', 'sepal-length-pca', 'petal-length']

Accuracy: 0.98

Pr[accept]: 1.0

Random uniform: 0.6841755156681438

Status: Improved

Iteration: 60

Accepted Features: ['petal-width-pca', 'petal-width', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-length']

Accuracy: 0.98

Pr[accept]: 1.0

Random uniform: 0.030312770761504848

Status: Accept

Iteration: 61

Accepted Features: ['sepal-width', 'sepal-width-pca', 'sepal-length', 'petal-width', 'petal-length']

Accuracy: 0.9866666666666667

Pr[accept]: 1.0

Random uniform: 0.05910984595651192

Status: Restart

Iteration: 62

Accepted Features: ['sepal-width', 'sepal-width-pca', 'sepal-length', 'petal-width', 'petal-length']

Accuracy: 0.98

Pr[accept]: 0.6577575247969778

Random uniform: 0.7521800012132815

Status: Reject

Iteration: 63

Accepted Features: ['sepal-width', 'sepal-width-pca', 'sepal-length', 'petal-width', 'petal-length']

Accuracy: 0.96

Pr[accept]: 0.27645304662956405

Random uniform: 0.9741588911654494

Status: Reject

Iteration: 64

Accepted Features: ['sepal-length', 'petal-width', 'sepal-width-pca', 'petal-length']

Accuracy: 0.98

Pr[accept]: 0.27645304662956405

Random uniform: 0.9741588911654494

Status: Improved

Iteration: 65

Accepted Features: ['sepal-length', 'petal-width', 'sepal-width-pca', 'petal-length', 'sepal-width', 'petal-width-pca']

Accuracy: 0.98

Pr[accept]: 1.0

Random uniform: 0.5773993912280769

Status: Accept

Iteration: 66

Accepted Features: ['sepal-length', 'petal-width', 'sepal-width-pca', 'petal-length', 'sepal-width', 'petal-width-pca', 'petal-length-pca']

Accuracy: 0.98

Pr[accept]: 1.0

Random uniform: 0.35918747774739546

Status: Accept

Iteration: 67

Accepted Features: ['sepal-length', 'petal-width', 'sepal-width-pca', 'petal-length', 'sepal-width', 'petal-width-pca', 'petal-length-pca', 'sepal-length-pca']

Accuracy: 0.98

Pr[accept]: 1.0

Random uniform: 0.9901358616298798

Status: Accept

Iteration: 68

Accepted Features: ['sepal-length', 'petal-width', 'sepal-width-pca', 'petal-length', 'sepal-width', 'petal-width-pca', 'petal-length-pca', 'sepal-length-pca']

Accuracy: 0.9733333333333334

Pr[accept]: 0.6296538632399297

Random uniform: 0.8387027356545225

Status: Reject

Iteration: 69

Accepted Features: ['petal-width-pca', 'petal-width', 'petal-length-pca', 'sepal-width', 'sepal-length', 'petal-length']

Accuracy: 0.9733333333333334

Pr[accept]: 1.0

Random uniform: 0.9289727352683478

Status: Accept

Iteration: 70

Accepted Features: ['petal-width-pca', 'petal-width', 'petal-length-pca', 'sepal-width', 'sepal-length', 'petal-length', 'sepal-width-pca']

Accuracy: 0.98

Pr[accept]: 1.0

Random uniform: 0.9289727352683478

Status: Improved

Iteration: 71

Accepted Features: ['sepal-width', 'sepal-width-pca', 'sepal-length', 'petal-width', 'petal-length']

Accuracy: 0.9866666666666667

Pr[accept]: 1.0

Random uniform: 0.6106453362623557

Status: Restart

Iteration: 72

Accepted Features: ['sepal-width', 'sepal-width-pca', 'sepal-length', 'petal-width', 'petal-length']

Accuracy: 0.94

Pr[accept]: 0.03319336058609351

Random uniform: 0.8365581217214094

Status: Reject

Iteration: 73

Accepted Features: ['sepal-width', 'sepal-width-pca', 'sepal-length', 'petal-width', 'petal-length', 'petal-length-pca']

Accuracy: 0.9866666666666667

Pr[accept]: 0.03319336058609351

Random uniform: 0.8365581217214094

Status: Improved

Iteration: 74

Accepted Features: ['sepal-width', 'sepal-width-pca', 'sepal-length', 'petal-width', 'petal-length', 'petal-length-pca', 'petal-width-pca', 'sepal-length-pca']

Accuracy: 0.98

Pr[accept]: 0.6065306597126314

Random uniform: 0.4575038215452506

Status: Accept

Iteration: 75

Accepted Features: ['petal-width', 'petal-length-pca', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-length']

Accuracy: 0.9733333333333334

Pr[accept]: 0.6003730411984076

Random uniform: 0.006883373643647994

Status: Accept

Iteration: 76

Accepted Features: ['petal-width', 'petal-length-pca', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-length', 'sepal-width', 'petal-width-pca']

Accuracy: 0.98

Pr[accept]: 0.6003730411984076

Random uniform: 0.006883373643647994

Status: Improved

Iteration: 77

Accepted Features: ['petal-width-pca', 'petal-width', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length']

Accuracy: 0.9733333333333334

Pr[accept]: 0.5922600162958962

Random uniform: 0.29276254038239613

Status: Accept

Iteration: 78

Accepted Features: ['sepal-width', 'petal-width-pca', 'sepal-length-pca', 'sepal-length', 'petal-width']

Accuracy: 0.98

Pr[accept]: 0.5922600162958962

Random uniform: 0.29276254038239613

Status: Improved

Iteration: 79

Accepted Features: ['sepal-width', 'petal-width-pca', 'sepal-length-pca', 'sepal-length', 'petal-width', 'sepal-width-pca', 'petal-length']

Accuracy: 0.98

Pr[accept]: 1.0

Random uniform: 0.9798365748381025

Status: Accept

Iteration: 80

Accepted Features: ['sepal-width', 'sepal-length-pca', 'sepal-length', 'petal-width', 'petal-length']

Accuracy: 0.98

Pr[accept]: 1.0

Random uniform: 0.6445117335521596

Status: Accept

Iteration: 81

Accepted Features: ['sepal-width', 'sepal-width-pca', 'sepal-length', 'petal-width', 'petal-length']

Accuracy: 0.9866666666666667

Pr[accept]: 1.0

Random uniform: 0.5581019194987328

Status: Restart

Iteration: 82

Accepted Features: ['sepal-width', 'sepal-width-pca', 'sepal-length', 'petal-width', 'petal-length']

Accuracy: 0.9733333333333334

Pr[accept]: 0.3301830411614306

Random uniform: 0.6948293934700106

Status: Reject

Iteration: 83

Accepted Features: ['sepal-width', 'sepal-width-pca', 'sepal-length', 'petal-width', 'petal-length', 'petal-width-pca', 'petal-length-pca']

Accuracy: 0.98

Pr[accept]: 0.3301830411614306

Random uniform: 0.6948293934700106

Status: Improved

Iteration: 84

Accepted Features: ['sepal-width', 'sepal-width-pca', 'sepal-length', 'petal-width', 'petal-length', 'petal-width-pca', 'petal-length-pca']

Accuracy: 0.9733333333333334

Pr[accept]: 0.5647181220077625

Random uniform: 0.9861208869534939

Status: Reject

Iteration: 85

Accepted Features: ['sepal-width', 'sepal-width-pca', 'petal-width-pca', 'sepal-length', 'petal-width', 'petal-length']

Accuracy: 0.98

Pr[accept]: 0.5647181220077625

Random uniform: 0.9861208869534939

Status: Improved

Iteration: 86

Accepted Features: ['petal-width-pca', 'sepal-length', 'petal-width', 'sepal-width-pca', 'petal-length']

Accuracy: 0.98

Pr[accept]: 1.0

Random uniform: 0.8299980346903553

Status: Accept

Iteration: 87

Accepted Features: ['petal-width-pca', 'petal-width', 'sepal-width-pca', 'petal-length']

Accuracy: 0.9666666666666667

Pr[accept]: 0.3061520302926314

Random uniform: 0.0720514410015003

Status: Accept

Iteration: 88

Accepted Features: ['petal-width-pca', 'petal-width', 'sepal-width-pca', 'petal-length']

Accuracy: 0.9533333333333334

Pr[accept]: 0.29706832876791756

Random uniform: 0.6223181285082521

Status: Reject

Iteration: 89

Accepted Features: ['petal-width', 'petal-width-pca', 'sepal-width-pca', 'petal-length']

Accuracy: 0.9666666666666667

Pr[accept]: 0.29706832876791756

Random uniform: 0.6223181285082521

Status: Improved

Iteration: 90

Accepted Features: ['petal-width', 'petal-width-pca', 'sepal-width-pca', 'petal-length', 'sepal-length']

Accuracy: 0.98

Pr[accept]: 0.29706832876791756

Random uniform: 0.6223181285082521

Status: Improved

Iteration: 91

Accepted Features: ['sepal-width', 'sepal-width-pca', 'sepal-length', 'petal-width', 'petal-length']

Accuracy: 0.9866666666666667

Pr[accept]: 0.5384570096736816

Random uniform: 0.405885964513507

Status: Restart

Iteration: 92

Accepted Features: ['sepal-width', 'sepal-width-pca', 'sepal-length', 'petal-width', 'petal-length']

Accuracy: 0.9666666666666667

Pr[accept]: 0.15491714321954417

Random uniform: 0.7376401578942737

Status: Reject

Iteration: 93

Accepted Features: ['sepal-width', 'petal-width', 'sepal-width-pca', 'petal-length']

Accuracy: 0.98

Pr[accept]: 0.15491714321954417

Random uniform: 0.7376401578942737

Status: Improved

Iteration: 94

Accepted Features: ['sepal-width', 'petal-width', 'sepal-width-pca', 'petal-length', 'sepal-length']

Accuracy: 0.9866666666666667

Pr[accept]: 0.15491714321954417

Random uniform: 0.7376401578942737

Status: Improved

Iteration: 95

Accepted Features: ['sepal-width', 'petal-width', 'sepal-width-pca', 'petal-length', 'sepal-length']

Accuracy: 0.98

Pr[accept]: 0.52629578684353

Random uniform: 0.9700581913487112

Status: Reject

Iteration: 96

Accepted Features: ['sepal-width', 'petal-width', 'sepal-width-pca', 'petal-length', 'sepal-length', 'petal-width-pca']

Accuracy: 0.98

Pr[accept]: 1.0

Random uniform: 0.9087266753573655

Status: Accept

Iteration: 97

Accepted Features: ['petal-width-pca', 'sepal-length', 'petal-width', 'sepal-width-pca', 'petal-length']

Accuracy: 0.98

Pr[accept]: 1.0

Random uniform: 0.05464927163538791

Status: Accept

Iteration: 98

Accepted Features: ['petal-width-pca', 'sepal-length', 'petal-width', 'sepal-width-pca', 'petal-length', 'petal-length-pca']

Accuracy: 0.98

Pr[accept]: 1.0

Random uniform: 0.6859993871712339

Status: Accept

Iteration: 99

Accepted Features: ['petal-width-pca', 'sepal-length', 'petal-width', 'sepal-width-pca', 'petal-length', 'petal-length-pca', 'sepal-width', 'sepal-length-pca']

Accuracy: 0.98

Pr[accept]: 1.0

Random uniform: 0.5330049296855985

Status: Accept

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Part 4 - Genetic algorithm

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Generation: 1

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....

Feature set ['sepal-width', 'sepal-width-pca', 'sepal-length-pca', 'petal-width', 'petal-length-pca', 'sepal-length-pca']

Accuracy 0.9866666666666667

....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-length']

Accuracy 0.98

....

Feature set ['sepal-length-pca', 'sepal-width-pca', 'petal-length-pca']

Accuracy 0.98

....

Feature set ['sepal-width-pca', 'petal-width-pca', 'sepal-length-pca', 'sepal-length', 'petal-length-pca', 'petal-width-pca']

Accuracy 0.98

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Generation: 2

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....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-length', 'petal-width-pca']

Accuracy 0.9866666666666667

....

Feature set ['sepal-width', 'sepal-length', 'petal-width', 'sepal-width-pca', 'petal-length']

Accuracy 0.9866666666666667

....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-length']

Accuracy 0.98

....

Feature set ['sepal-length-pca', 'sepal-width-pca', 'petal-length-pca']

Accuracy 0.98

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Generation: 3

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....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'sepal-length']

Accuracy 0.98

....

Feature set ['sepal-length-pca', 'sepal-width-pca', 'petal-length-pca']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-width-pca', 'petal-width-pca', 'sepal-length-pca', 'sepal-length']

Accuracy 0.98

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Generation: 4

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....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-length']

Accuracy 0.98

....

Feature set ['sepal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'petal-width-pca']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'petal-length']

Accuracy 0.98

....

Feature set ['sepal-width', 'petal-width', 'petal-length', 'sepal-width-pca']

Accuracy 0.98

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Generation: 5

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....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca']

Accuracy 0.98

....

Feature set ['sepal-length-pca', 'sepal-width-pca', 'petal-length-pca', 'petal-length-pca']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-length-pca', 'sepal-width-pca', 'petal-length-pca']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-width-pca', 'sepal-length-pca', 'sepal-length', 'petal-length-pca', 'sepal-width-pca']

Accuracy 0.98

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Generation: 6

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....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'sepal-length']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-length']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-width-pca', 'petal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'petal-length', 'petal-width']

Accuracy 0.98

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Generation: 7

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....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca']

Accuracy 0.98

....

Feature set ['sepal-length-pca', 'sepal-width-pca', 'petal-length-pca']

Accuracy 0.98

....

Feature set ['sepal-length-pca', 'sepal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['sepal-width-pca', 'petal-width-pca', 'sepal-length-pca', 'sepal-length', 'petal-length-pca']

Accuracy 0.98

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Generation: 8

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....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-length']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-width-pca', 'sepal-length-pca', 'sepal-length', 'petal-length-pca', 'sepal-width']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-width-pca', 'petal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'petal-length']

Accuracy 0.98

....

Feature set ['sepal-width', 'petal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'petal-length', 'sepal-width-pca']

Accuracy 0.98

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Generation: 9

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....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-length']

Accuracy 0.98

....

Feature set ['sepal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'sepal-width']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-length-pca', 'petal-length-pca', 'sepal-width-pca']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-width-pca', 'petal-width-pca', 'sepal-length-pca', 'petal-length-pca']

Accuracy 0.98

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Generation: 10

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....

Feature set ['sepal-width', 'sepal-width-pca', 'sepal-length', 'petal-width', 'petal-length-pca', 'petal-length']

Accuracy 0.9866666666666667

....

Feature set ['sepal-width', 'sepal-length', 'petal-width', 'sepal-width-pca', 'petal-length']

Accuracy 0.9866666666666667

....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'petal-width-pca']

Accuracy 0.98

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Generation: 11

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....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-length']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-length']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-width-pca', 'petal-length', 'petal-width']

Accuracy 0.98

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Generation: 12

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....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-length']

Accuracy 0.98

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Feature set ['sepal-width', 'sepal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'petal-width-pca']

Accuracy 0.98

…………………

Feature set ['sepal-width', 'sepal-width-pca', 'petal-width-pca', 'sepal-length-pca', 'sepal-length']

Accuracy 0.98

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Feature set ['sepal-width', 'sepal-width-pca', 'sepal-length-pca', 'sepal-length', 'petal-length-pca', 'petal-length', 'petal-width-pca']

Accuracy 0.98

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Generation: 13

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Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

…………………

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca']

Accuracy 0.98

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Feature set ['sepal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'petal-width-pca']

Accuracy 0.98

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Feature set ['sepal-width', 'sepal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'sepal-length']

Accuracy 0.98

…………………

Feature set ['sepal-width', 'sepal-length-pca', 'sepal-width-pca', 'petal-length-pca']

Accuracy 0.98

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Generation: 14

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....

Feature set ['sepal-width', 'sepal-width-pca', 'petal-width', 'petal-length-pca', 'petal-length']

Accuracy 0.9866666666666667

....

Feature set ['sepal-width', 'sepal-width-pca', 'sepal-length', 'petal-width', 'petal-length-pca', 'petal-length']

Accuracy 0.9866666666666667

....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-width-pca', 'petal-length']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-width-pca', 'petal-length-pca', 'sepal-length-pca']

Accuracy 0.98

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Generation: 15

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....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-length']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'sepal-length']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-width', 'petal-length-pca', 'sepal-width', 'sepal-length', 'sepal-width-pca', 'petal-length', 'sepal-width-pca']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-width', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-width-pca', 'petal-length', 'sepal-length']

Accuracy 0.98

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Generation: 16

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....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-width-pca', 'petal-length']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-width-pca', 'petal-length', 'petal-width']

Accuracy 0.98

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Generation: 17

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....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-length']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'petal-width']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-width-pca', 'petal-width-pca', 'sepal-length-pca', 'sepal-length', 'petal-length-pca', 'petal-length']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-width', 'petal-length-pca', 'sepal-width', 'sepal-length', 'sepal-width-pca', 'petal-length']

Accuracy 0.98

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Generation: 18

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....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-width', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-length']

Accuracy 0.98

....

Feature set ['sepal-length-pca', 'sepal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-width', 'petal-length-pca', 'sepal-width', 'sepal-length', 'sepal-width-pca', 'petal-length']

Accuracy 0.98

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Generation: 19

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....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca']

Accuracy 0.98

....

Feature set ['sepal-length-pca', 'sepal-width-pca', 'petal-length-pca']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-length']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-width-pca', 'petal-width-pca', 'sepal-length', 'petal-length-pca', 'petal-length', 'sepal-length-pca']

Accuracy 0.98

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Generation: 20

****

....

Feature set ['sepal-width', 'sepal-width-pca', 'sepal-length', 'petal-width', 'petal-length-pca', 'petal-length']

Accuracy 0.9866666666666667

....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-length']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-length']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-width-pca', 'petal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'petal-length', 'petal-width-pca']

Accuracy 0.98

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Generation: 21

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....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-length']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-length-pca', 'sepal-width-pca', 'petal-length-pca']

Accuracy 0.98

....

Feature set ['sepal-width-pca', 'petal-width-pca', 'sepal-length-pca', 'sepal-length', 'petal-length-pca']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-width-pca', 'petal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'petal-length']

Accuracy 0.98

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Generation: 22

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....

Feature set ['sepal-width', 'sepal-length', 'petal-width', 'sepal-width-pca', 'petal-length']

Accuracy 0.9866666666666667

....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-width-pca', 'petal-length']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'petal-width-pca']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-width', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-width-pca', 'petal-length', 'sepal-length']

Accuracy 0.98

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Generation: 23

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....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-length']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'sepal-length']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-width']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-width-pca', 'petal-width-pca', 'sepal-length-pca', 'sepal-length', 'petal-length-pca']

Accuracy 0.98

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Generation: 24

****

....

Feature set ['sepal-width', 'sepal-length', 'petal-width', 'sepal-width-pca', 'petal-length']

Accuracy 0.9866666666666667

....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-width-pca', 'petal-length']

Accuracy 0.98

....

Feature set ['sepal-width', 'petal-width-pca', 'sepal-length-pca', 'sepal-length', 'petal-length-pca']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-width-pca', 'petal-width-pca', 'sepal-length-pca', 'sepal-length', 'petal-length-pca']

Accuracy 0.98

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Generation: 25

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....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-width-pca', 'petal-length']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-width-pca', 'sepal-length-pca', 'sepal-length', 'petal-length-pca', 'petal-length']

Accuracy 0.98

....

Feature set ['sepal-width-pca', 'petal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'petal-length']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-width', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-width-pca', 'petal-length']

Accuracy 0.98

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Generation: 26

****

....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['sepal-width-pca', 'sepal-length-pca', 'petal-length-pca']

Accuracy 0.98

....

Feature set ['sepal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'petal-width-pca']

Accuracy 0.98

....

Feature set ['sepal-length-pca', 'sepal-width-pca', 'petal-length-pca']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-length-pca', 'sepal-width-pca', 'petal-length-pca']

Accuracy 0.98

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Generation: 27

****

....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca']

Accuracy 0.98

....

Feature set ['sepal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'petal-width-pca']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'petal-length']

Accuracy 0.98

....

Feature set ['sepal-length-pca', 'sepal-length', 'petal-width']

Accuracy 0.98

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Generation: 28

****

....

Feature set ['sepal-width', 'sepal-length-pca', 'sepal-length', 'petal-width', 'petal-length', 'sepal-width']

Accuracy 0.9866666666666667

....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-width-pca', 'petal-length']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-length']

Accuracy 0.98

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Generation: 29

****

....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-width-pca', 'petal-length']

Accuracy 0.98

....

Feature set ['sepal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'petal-width-pca']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'petal-length']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-width', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-width-pca', 'petal-length', 'sepal-length']

Accuracy 0.98

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Generation: 30

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....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-width-pca', 'petal-length']

Accuracy 0.98

....

Feature set ['sepal-width-pca', 'petal-width-pca', 'sepal-length-pca', 'sepal-length', 'petal-length-pca', 'sepal-width-pca']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-width-pca', 'petal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'petal-length']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-width', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-width-pca', 'petal-length']

Accuracy 0.98

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Generation: 31

****

....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-length']

Accuracy 0.98

....

Feature set ['sepal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'sepal-width']

Accuracy 0.98

....

Feature set ['sepal-length-pca', 'sepal-width-pca', 'petal-length-pca']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-width']

Accuracy 0.98

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Generation: 32

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....

Feature set ['sepal-width', 'sepal-width-pca', 'petal-width', 'petal-length-pca', 'petal-length']

Accuracy 0.9866666666666667

....

Feature set ['sepal-width', 'sepal-length', 'petal-width', 'sepal-width-pca', 'petal-length']

Accuracy 0.9866666666666667

....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-length']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-width-pca', 'sepal-length-pca', 'sepal-length', 'petal-length-pca', 'sepal-width']

Accuracy 0.98

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Generation: 33

****

....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-width-pca', 'petal-length']

Accuracy 0.98

....

Feature set ['sepal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'petal-width-pca']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-length', 'petal-width']

Accuracy 0.98

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Generation: 34

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....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-length']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'petal-length']

Accuracy 0.98

....

Feature set ['sepal-width', 'petal-width-pca', 'sepal-length-pca', 'sepal-length', 'petal-length-pca', 'petal-length-pca']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-width', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'sepal-length-pca']

Accuracy 0.98

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Generation: 35

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....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'sepal-length']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-length-pca', 'sepal-width-pca', 'petal-length-pca']

Accuracy 0.98

....

Feature set ['sepal-width', 'petal-width', 'sepal-length-pca', 'petal-length', 'sepal-length']

Accuracy 0.98

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Generation: 36

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....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca']

Accuracy 0.98

....

Feature set ['sepal-length-pca', 'sepal-width-pca', 'petal-length-pca']

Accuracy 0.98

....

Feature set ['sepal-width-pca', 'petal-width-pca', 'sepal-length-pca', 'sepal-length', 'petal-length-pca']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-length', 'petal-width']

Accuracy 0.98

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Generation: 37

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....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

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Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-length']

Accuracy 0.98

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Feature set ['sepal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'petal-width-pca']

Accuracy 0.98

…………………

Feature set ['sepal-width', 'sepal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'petal-length']

Accuracy 0.98

…………………

Feature set ['sepal-width-pca', 'petal-width-pca', 'sepal-length-pca', 'sepal-length', 'petal-length-pca']

Accuracy 0.98
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Generation: 38
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…………………

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

…………………

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca']

Accuracy 0.98

…………………

Feature set ['sepal-width', 'sepal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'petal-length']

Accuracy 0.98

…………………

Feature set ['sepal-width', 'sepal-length-pca', 'sepal-width-pca', 'sepal-length']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-width']

Accuracy 0.98

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Generation: 39

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....

Feature set ['sepal-width', 'sepal-length', 'petal-width', 'sepal-width-pca', 'petal-length']

Accuracy 0.9866666666666667

....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca']

Accuracy 0.98

....

Feature set ['sepal-length-pca', 'sepal-width-pca', 'petal-length-pca']

Accuracy 0.98

....

Feature set ['sepal-length-pca', 'sepal-length', 'petal-width']

Accuracy 0.98

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Generation: 40

****

....

Feature set ['sepal-width', 'sepal-width-pca', 'petal-width', 'petal-length-pca', 'petal-length', 'sepal-width-pca']

Accuracy 0.9866666666666667

....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-width-pca', 'petal-length']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-width-pca', 'petal-width-pca', 'sepal-length-pca', 'sepal-length']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-width-pca', 'petal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'petal-length']

Accuracy 0.98

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Generation: 41

****

....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-length']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-length-pca', 'sepal-width-pca', 'petal-length', 'petal-length-pca']

Accuracy 0.98

....

Feature set ['sepal-width', 'petal-width-pca', 'sepal-length-pca', 'sepal-length', 'petal-length-pca', 'sepal-width-pca']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-width-pca', 'petal-length', 'petal-width']

Accuracy 0.98

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Generation: 42

****

....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-width-pca', 'petal-length']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-width-pca', 'sepal-length-pca', 'sepal-length', 'petal-length-pca', 'petal-length-pca']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-width-pca', 'petal-width-pca', 'petal-length-pca', 'petal-length', 'petal-length']

Accuracy 0.98

....

Feature set ['petal-width', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-width-pca', 'petal-length', 'petal-width-pca']

Accuracy 0.98

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Generation: 43

****

....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'petal-width-pca']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-length-pca', 'sepal-width-pca', 'sepal-length']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-length']

Accuracy 0.98

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Generation: 44

****

....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-length-pca', 'sepal-width-pca', 'petal-length-pca']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-width-pca', 'petal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'petal-length']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-length', 'petal-width']

Accuracy 0.98

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Generation: 45

****

....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-length']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-width-pca', 'petal-width-pca', 'sepal-length-pca', 'petal-length-pca']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-width-pca', 'petal-length', 'petal-width']

Accuracy 0.98

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Generation: 46

****

....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-length']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-width-pca', 'petal-width-pca', 'sepal-length-pca', 'petal-length-pca']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-width-pca', 'petal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'petal-length']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'petal-length']

Accuracy 0.98

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Generation: 47

****

....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca']

Accuracy 0.98

....

Feature set ['sepal-width-pca', 'petal-length-pca', 'sepal-length-pca']

Accuracy 0.98

....

Feature set ['sepal-length-pca', 'sepal-width-pca', 'petal-length-pca']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-length']

Accuracy 0.98

****

Generation: 48

****

....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca']

Accuracy 0.98

....

Feature set ['sepal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'petal-width-pca']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca', 'petal-width']

Accuracy 0.98

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Generation: 49

****

....

Feature set ['sepal-width', 'sepal-width-pca', 'petal-width', 'petal-length-pca', 'petal-length']

Accuracy 0.9866666666666667

....

Feature set ['sepal-length-pca', 'sepal-length', 'sepal-width', 'petal-length', 'petal-width']

Accuracy 0.98

....

Feature set ['petal-width-pca', 'petal-length-pca', 'sepal-width', 'sepal-length-pca', 'sepal-length', 'sepal-width-pca']

Accuracy 0.98

....

Feature set ['sepal-width', 'sepal-width-pca', 'sepal-length-pca', 'petal-length-pca', 'petal-width-pca']

Accuracy 0.98

....

Feature set ['sepal-width', 'petal-width', 'sepal-length-pca', 'petal-length', 'sepal-length']

Accuracy 0.98