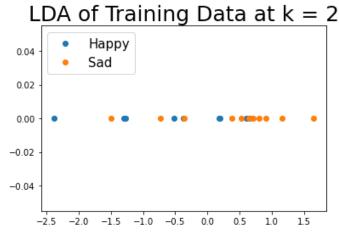
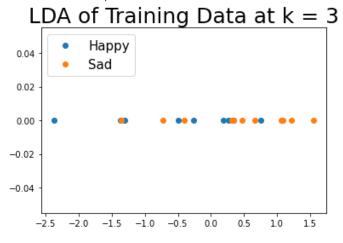
Data not well seperated for k = 1

LDA of Training Data at k = 1 Happy Sad O.02 O.04 -0.02 -0.04 -1.5 -1.0 -0.5 O.00 O.05 10 15 2.0 2.5

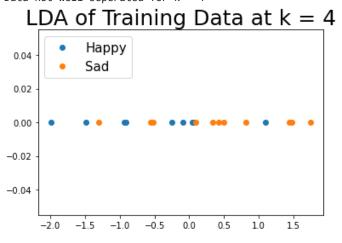
Data not well seperated for k = 2



Data not well seperated for k = 3



Data not well seperated for k = 4



Data not well seperated for k = 5

LDA of Training Data at k = 5 Output Happy Sad Output Output Happy Sad Output O

Data not well seperated for k = 6



Data not well seperated for k = 7

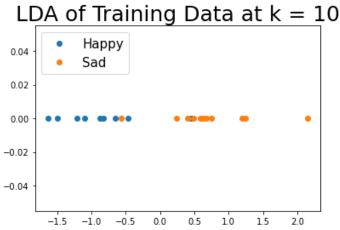


Data not well seperated for k = 8



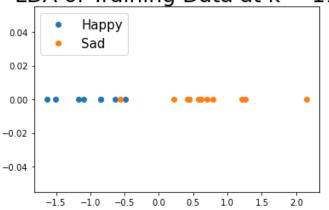
Data not well seperated for k = 9

Data not well seperated for k = 10



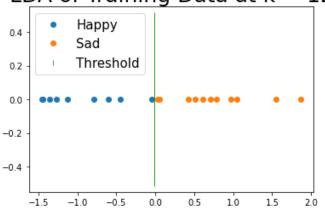
Data not well seperated for k = 11

LDA of Training Data at k = 11



Well seperated data at k = 12

LDA of Training Data at k = 12

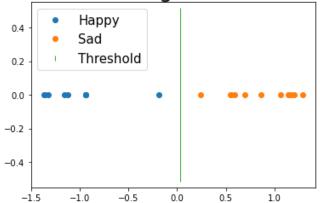


seperability = 1.7281663979349156

Actual Classes
[1, 0, 0, 0, 1, 0, 0, 1, 0, 1]
Predicted Classes
[1. 0. 0. 0. 1. 0. 0. 1. 0. 1.]
threshold = -0.008410572009631224
Accuracy for k=12 is 100.0%

Well seperated data at k = 13

LDA of Training Data at k = 13

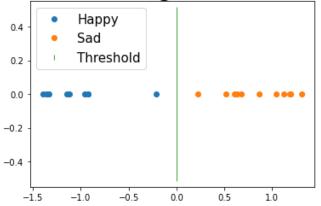


seperability = 1.8926186839890828
Actual Classes
[1, 0, 0, 0, 1, 0, 0, 1, 0, 1]
Predicted Classes
[1. 1. 0. 0. 0. 0. 0. 1. 0. 1.]
threshold = 0.027455544716011387

Accuracy for k=13 is 80.0%

Well seperated data at k = 14

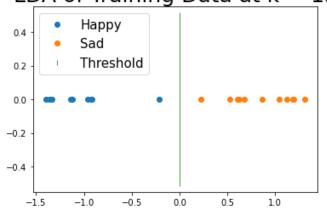
LDA of Training Data at k = 14



seperability = 1.893385120765254
Actual Classes
[1, 0, 0, 0, 1, 0, 0, 1, 0, 1]
Predicted Classes
[1. 1. 0. 0. 1. 0. 0. 1. 0. 1.]
threshold = 0.005305477160939029
Accuracy for k=14 is 90.0%

Well seperated data at k = 15

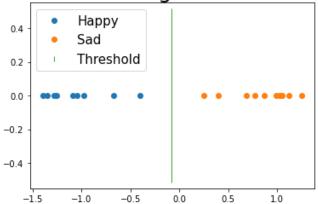
LDA of Training Data at k = 15



seperability = 1.89339289850176
Actual Classes
[1, 0, 0, 0, 1, 0, 0, 1, 0, 1]
Predicted Classes
[1. 1. 0. 0. 1. 0. 0. 1. 0. 1.]
threshold = 0.005099790981005645
Accuracy for k=15 is 90.0%

Well seperated data at k = 16

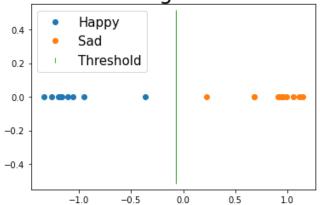
LDA of Training Data at k = 16



seperability = 1.915848813975702
Actual Classes
[1, 0, 0, 0, 1, 0, 0, 1, 0, 1]
Predicted Classes
[1. 0. 0. 1. 1. 0. 0. 1. 0. 1.]
threshold = -0.07671631741865395
Accuracy for k=16 is 90.0%

Well seperated data at k = 17

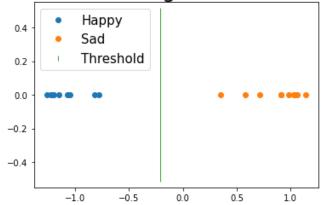
LDA of Training Data at k = 17



seperability = 1.9412566138322778 Actual Classes [1, 0, 0, 0, 1, 0, 0, 1, 0, 1] Predicted Classes [1. 0. 0. 1. 1. 0. 0. 1. 0. 1.] threshold = -0.07127974035731899 Accuracy for k=17 is 90.0%

Well seperated data at k = 18

LDA of Training Data at k = 18



seperability = 1.9677446173207835
Actual Classes
[1, 0, 0, 0, 1, 0, 0, 1, 0, 1]

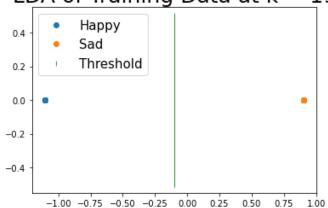
Predicted Classes

[1. 1. 0. 1. 1. 0. 0. 1. 0. 1.]

threshold = -0.21106361167320276 Accuracy for k=18 is 80.0%

Well seperated data at k = 19

LDA of Training Data at k = 19



seperability = 2.01007563051842

Actual Classes

[1, 0, 0, 0, 1, 0, 0, 1, 0, 1]

Predicted Classes

[1. 0. 0. 1. 1. 0. 0. 1. 0. 1.]

threshold = -0.10050378152592115

Accuracy for k=19 is 90.0%
