Trial #	Parameters Chosen	Results
1	RNN: • Number of Layers = 2 • Units = 50 • Activation Function = tanh • Dropout Parameter = 0.2 • Dense Parameter = 1 • Error Function = MSE • Optimizer = adam • Epochs = 50 • Batch Size = 32 • Verbose = 2 K-Means Clustering: • K = 5	Statistics: • Train/Test Split = 80:20 • Size of Dataset = 251 • Training Accuracy = 91.41% • Test Accuracy = 74.59% • Training RMSE = 1.72 • Test RMSE = 2.56 • Tomorrow's Opening Price = $176.52 Predicted Centroids (Value: Count): • Near $150.32 (predicted): 11 opening prices • Near $152.54 (predicted): 12 opening prices • Near $158.22 (predicted): 9 opening prices • Near $147.59 (predicted): 8 opening prices • Near $143.61 (predicted): 5 opening prices Actual Centroids (Value: Count): • Near $149.46 (actual): 6 opening prices • Near $146.83 (actual): 11 opening prices • Near $159.94 (actual): 10 opening prices • Near $153.79 (actual): 11 opening prices • Near $151.28 (actual): 7 opening prices
2	RNN: • Number of Layers = 2 • Units = 60 • Activation Function = tanh • Dropout Parameter = 0.2 • Dense Parameter = 1 • Error Function = MSE • Optimizer = adam • Epochs = 60 • Batch Size = 35 • Verbose = 3 K-Means Clustering: • K = 7	Statistics: • Train/Test Split = 80:20 • Size of Dataset = 251 • Training Accuracy = 90.40% • Test Accuracy = 78.99% • Training RMSE = 1.81 • Test RMSE = 2.33 • Tomorrow's Opening Price = $183.10 Predicted Centroids (Value: Count): • Near $150.95 (predicted): 6 opening prices • Near $153.78 (predicted): 11 opening prices • Near $148.11 (predicted): 7 opening prices • Near $143.90 (predicted): 5 opening prices • Near $159.50 (predicted): 9 opening prices • Near $149.13 (predicted): 1 opening prices • Near $151.84 (predicted): 6 opening prices Actual Centroids (Value: Count): • Near $152.57 (actual): 6 opening prices • Near $153.70 (actual): 6 opening prices • Near $156.08 (actual): 4 opening prices • Near $159.94 (actual): 8 opening prices • Near $147.81 (actual): 9 opening prices • Near $143.97 (actual): 4 opening prices • Near $150.64 (actual): 8 opening prices
3	RNN: • Number of Layers = 2 • Units = 70 • Activation Function = tanh • Dropout Parameter = 0.2 • Dense Parameter = 1 • Error Function = MSE • Optimizer = adam • Epochs = 70 • Batch Size = 40 • Verbose = 4 K-Means Clustering: • K = 9	Statistics: • Train/Test Split = 80:20 • Size of Dataset = 251 • Training Accuracy = 91.03% • Test Accuracy = 79.57% • Training RMSE = 1.75 • Test RMSE = 2.29 • Tomorrow's Opening Price = $177.31 Predicted Centroids (Value: Count): • Near $148.18 (predicted): 2 opening prices • Near $147.63 (predicted): 1 opening prices • Near $151.88 (predicted): 5 opening prices • Near $151.07 (predicted): 3 opening prices • Near $147.88 (predicted): 3 opening prices • Near $144.02 (predicted): 5 opening prices • Near $158.04 (predicted): 7 opening prices • Near $160.43 (predicted): 2 opening prices

		- Near $150.36 (predicted): 3 opening prices - Near $149.84 (predicted): 3 opening prices - Near $147.22 (predicted): 2 opening prices - Near $153.23 (predicted): 9 opening prices Actual Centroids (Value: Count): - Near $147.71 (actual): 2 opening prices - Near $148.03 (actual): 2 opening prices - Near $147.05 (actual): 3 opening prices - Near $153.70 (actual): 6 opening prices - Near $152.81 (actual): 3 opening prices - Near $152.16 (actual): 3 opening prices - Near $156.08 (actual): 4 opening prices - Near $159.94 (actual): 8 opening prices - Near $148.90 (actual): 3 opening prices - Near $143.97 (actual): 4 opening prices - Near $150.21 (actual): 4 opening prices - Near $151.19 (actual): 3 opening prices
4	RNN: - Number of Layers = 2 - Units = 80 - Activation Function = tanh - Dropout Parameter = 0.2 - Dense Parameter = 1 - Error Function = MSE - Optimizer = adam - Epochs = 80 - Batch Size = 45 - Verbose = 5 K-Means Clustering: - K = 10	Statistics: - Train/Test Split = 80:20 - Size of Dataset = 251 - Training Accuracy = 89.82% - Test Accuracy = 69.27% - Training RMSE = 1.86 - Test RMSE = 2.81 - Tomorrow's Opening Price = $178.58 Predicted Centroids (Value: Count): - Near $148.36 (predicted): 3 opening prices - Near $159.52 (predicted): 2 opening prices - Near $150.65 (predicted): 7 opening prices - Near $147.02 (predicted): 4 opening prices - Near $146.72 (predicted): 3 opening prices - Near $152.10 (predicted): 8 opening prices - Near $154.37 (predicted): 3 opening prices - Near $149.46 (predicted): 4 opening prices - Near $143.37 (predicted): 5 opening prices - Near $156.90 (predicted): 6 opening prices Actual Centroids (Value: Count): - Near $148.04 (actual): 6 opening prices - Near $158.86 (actual): 5 opening prices - Near $150.09 (actual): 5 opening prices - Near $147.05 (actual): 3 opening prices - Near $143.97 (actual): 4 opening prices - Near $159.94 (actual): 1 opening prices - Near $156.08 (actual): 3 opening prices - Near $162.44 (actual): 3 opening prices - Near $153.11 (actual): 10 opening prices - Near $151.28 (actual): 5 opening prices
5	RNN: - Number of Layers = 2 - Units = 90 - Activation Function = tanh - Dropout Parameter = 0.2 - Dense Parameter = 1 - Error Function = MSE - Optimizer = adam - Epochs = 90 - Batch Size = 50 - Verbose = 6 K-Means Clustering: - K = 12	Statistics: - Train/Test Split = 80:20 - Size of Dataset = 251 - Training Accuracy = 91.98% - Test Accuracy = 77.22% - Training RMSE = 1.66 - Test RMSE = 2.42 - Tomorrow's Opening Price = $181.64 Predicted Centroids (Value: Count): - Near $150.26 (predicted): 4 opening prices - Near $152.55 (predicted): 3 opening prices - Near $149.36 (predicted): 2 opening prices - Near $152.15 (predicted): 2 opening prices - Near $151.38 (predicted): 5 opening prices - Near $147.80 (predicted): 2 opening prices - Near $151.85 (predicted): 1 opening prices - Near $153.31 (predicted): 6 opening prices - Near $143.94 (predicted): 5 opening prices - Near $148.46 (predicted): 2 opening prices

		Near $158.70 (predicted): 9 opening prices Near $147.36 (predicted): 4 opening prices Actual Centroids (Value: Count): • Near $152.35 (actual): 4 opening prices • Near $153.88 (actual): 7 opening prices • Near $143.97 (actual): 4 opening prices • Near $148.04 (actual): 6 opening prices • Near $151.28 (actual): 2 opening prices • Near $150.64 (actual): 2 opening prices • Near $153.11 (actual): 2 opening prices • Near $162.44 (actual): 3 opening prices • Near $157.32 (actual): 3 opening prices • Near $147.05 (actual): 3 opening prices • Near $159.30 (actual): 5 opening prices • Near $150.09 (actual): 4 opening prices