

Experiment Number	Parameters Chosen	Results
1	Learning Rate = 0.001 Number of Iterations = 10	Train/Test Split = 0.82: 0.18 Size of Dataset = 1461 Traning Accuracy = 0.79917 Test Accuracy = 0.84674 Test Precision = 0.82759 Test Recall = 0.74227 Test F1-score = 0.78261
2	Learning Rate = 0.001 Number of Iterations = 50	Train/Test Split = 0.82: 0.18 Size of Dataset = 1461 Traning Accuracy = 0.78333 Test Accuracy = 0.83525 Test Precision = 0.875 Test Recall = 0.64948 Test F1-score = 0.74556
3	Learning Rate = 0.001 Number of Iterations = 100	Train/Test Split = 0.82: 0.18 Size of Dataset = 1461 Traning Accuracy = 0.78833 Test Accuracy = 0.8659 Test Precision = 1.0 Test Recall = 0.63918 Test F1-score = 0.77987
4	Learning Rate = 0.001 Number of Iterations = 500	Train/Test Split = 0.82: 0.18 Size of Dataset = 1461 Traning Accuracy = 0.82250 Test Accuracy = 0.89272 Test Precision = 0.92593 Test Recall = 0.7732 Test F1-score = 0.8427
5	Learning Rate = 0.005 Number of Iterations = 10	Train/Test Split = 0.82: 0.18 Size of Dataset = 1461 Traning Accuracy = 0.68833 Test Accuracy = 0.79693 Test Precision = 0.94 Test Recall = 0.48454 Test F1-score = 0.63946
6	Learning Rate = 0.005 Number of Iterations = 50	Train/Test Split = 0.82: 0.18 Size of Dataset = 1461 Traning Accuracy = 0.79833 Test Accuracy = 0.86207 Test Precision = 0.96923 Test Recall = 0.64948 Test F1-score = 0.77778

7	Learning Rate = 0.005 Number of Iterations = 100	Train/Test Split = 0.82: 0.18 Size of Dataset = 1461 Traning Accuracy = 0.82750 Test Accuracy = 0.88506 Test Precision = 0.94667 Test Recall = 0.73196 Test F1-score = 0.82558
8	Learning Rate = 0.005 Number of Iterations = 500	Train/Test Split = 0.82: 0.18 Size of Dataset = 1461 Traning Accuracy = 0.85917 Test Accuracy = 0.90421 Test Precision = 0.95 Test Recall = 0.78351 Test F1-score = 0.85876
9	Learning Rate = 0.01 Number of Iterations = 10	Train/Test Split = 0.82: 0.18 Size of Dataset = 1461 Traning Accuracy = 0.75750 Test Accuracy = 0.7575 Test Precision = 0.95238 Test Recall = 0.61856 Test F1-score = 0.75
10	Learning Rate = 0.01 Number of Iterations = 50	Train/Test Split = 0.82: 0.18 Size of Dataset = 1461 Traning Accuracy = 0.82417 Test Accuracy = 0.88889 Test Precision = 0.97222 Test Recall = 0.72165 Test F1-score = 0.8284
11	Learning Rate = 0.01 Number of Iterations = 100	Train/Test Split = 0.82: 0.18 Size of Dataset = 1461 Traning Accuracy = 0.84750 Test Accuracy = 0.89655 Test Precision = 0.94872 Test Recall = 0.76289 Test F1-score = 0.84571
12	Learning Rate = 0.01 Number of Iterations = 500	Train/Test Split = 0.82: 0.18 Size of Dataset = 1461 Traning Accuracy = 0.86583 Test Accuracy = 0.90805 Test Precision = 0.96203 Test Recall = 0.78351 Test F1-score = 0.86364

13	Learning Rate = 0.05 Number of Iterations = 10	Train/Test Split = 0.82: 0.18 Size of Dataset = 1461 Training Accuracy = 0.84500 Test Accuracy = 0.87356 Test Precision = 0.98485 Test Recall = 0.6701 Test F1-score = 0.79755
14	Learning Rate = 0.05 Number of Iterations = 50	Train/Test Split = 0.82: 0.18 Size of Dataset = 1461 Training Accuracy = 0.85417 Test Accuracy = 0.89655 Test Precision = 0.94872 Test Recall = 0.76289 Test F1-score = 0.84571
15	Learning Rate = 0.05 Number of Iterations = 100	Train/Test Split = 0.82: 0.18 Size of Dataset = 1461 Training Accuracy = 0.87000 Test Accuracy = 0.90421 Test Precision = 0.97368 Test Recall = 0.76289 Test F1-score = 0.85549
16	Learning Rate = 0.05 Number of Iterations = 500	Train/Test Split = 0.82: 0.18 Size of Dataset = 1461 Training Accuracy = 0.89417 Test Accuracy = 0.92337 Test Precision = 1.0 Test Recall = 0.79381 Test F1-score = 0.88506