

Lab 1 - Baseline Models Report

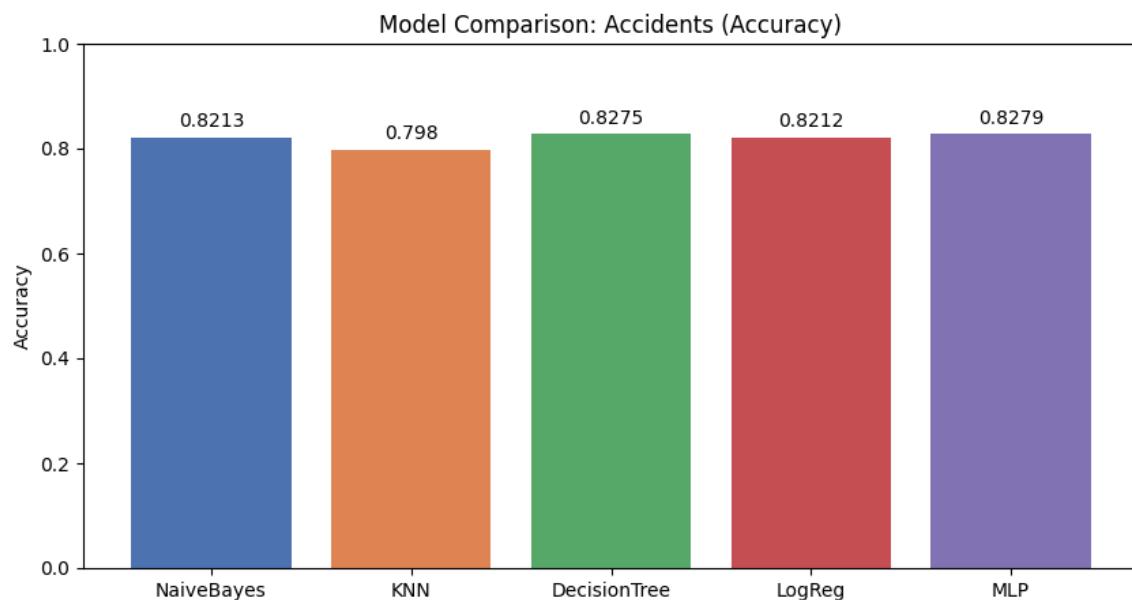
Results Summary

Dataset	Model	Accuracy	Precision (Macro)	Recall (Macro)	Note
Accidents	NaiveBayes	0.8213	0.88	0.80	Success
Accidents	KNN	0.7800	0.81	0.73	Success (Sampled: 1000 train)
Accidents	DecisionTree	0.8300	0.87	0.81	Success
Accidents	LogReg	0.8600	0.90	0.82	Success (Sampled: 1000 train)
Accidents	MLP	0.8667	0.90	0.82	Success (Sampled: 1000 train)
Flights	NaiveBayes	0.9338	0.92	0.87	Success
Flights	KNN	0.7733	0.66	0.54	Success (Sampled: 1000 train)
Flights	DecisionTree	0.9400	0.93	0.90	Success
Flights	LogReg	0.9767	0.97	0.96	Success (Sampled: 1000 train)
Flights	MLP	0.7700	0.39	0.50	Success (Sampled: 1000 train)

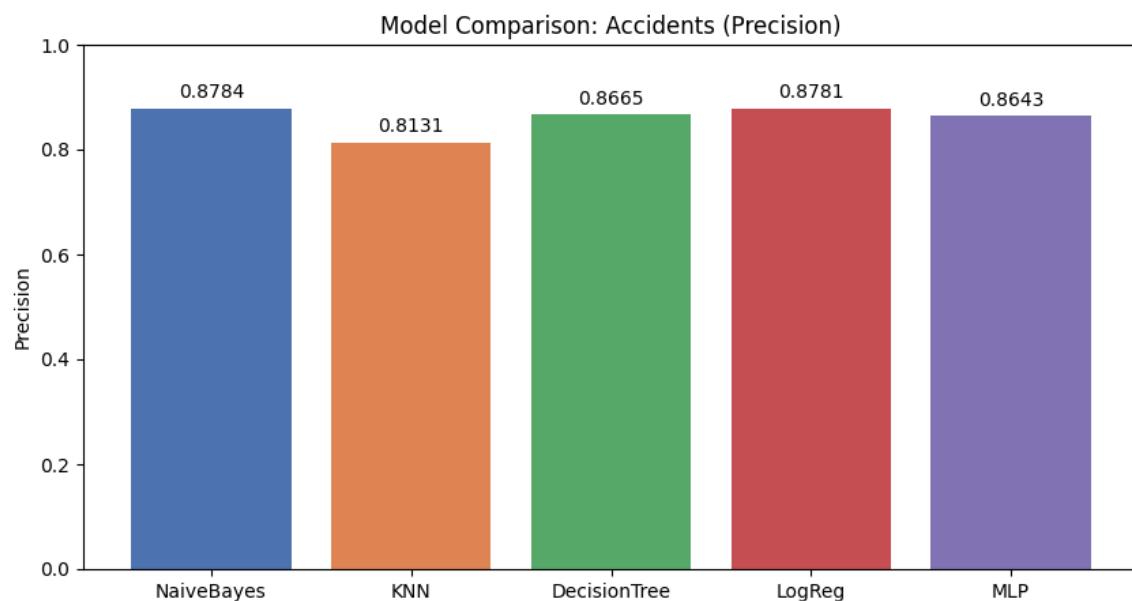
Accidents Dataset

Final Model Comparison

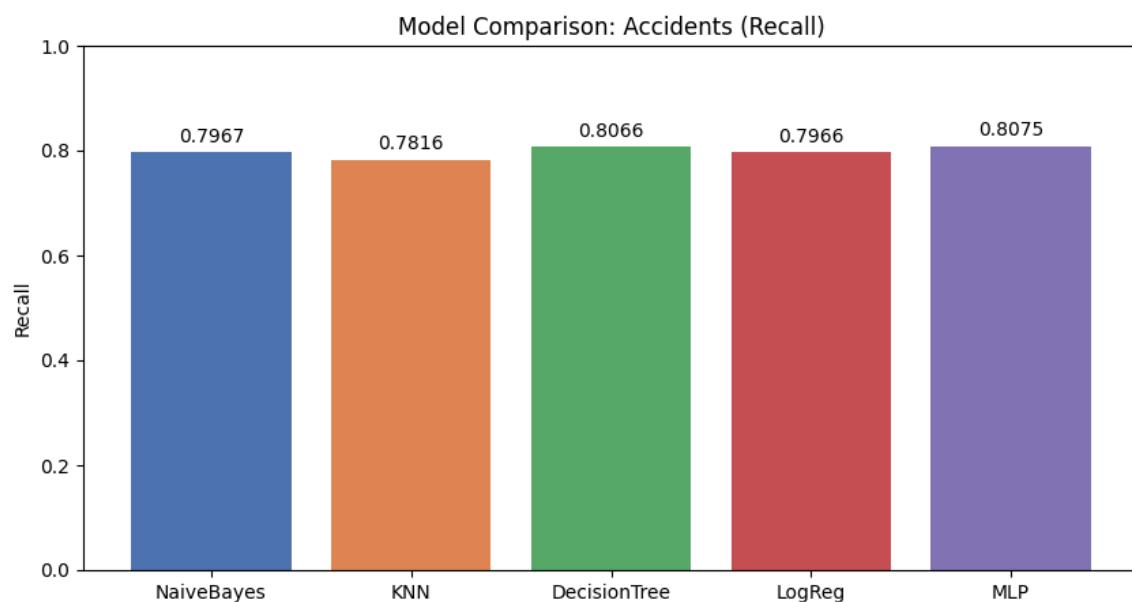
Accuracy Comparison



Precision Comparison

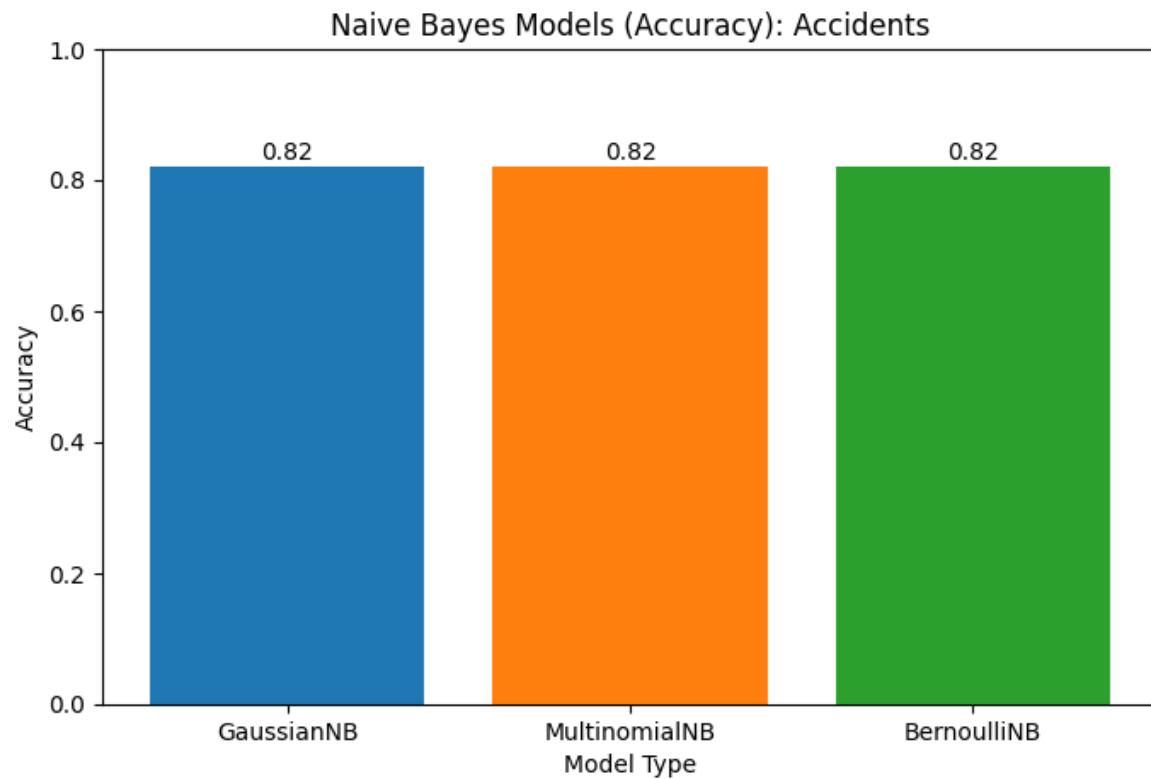


Recall Comparison

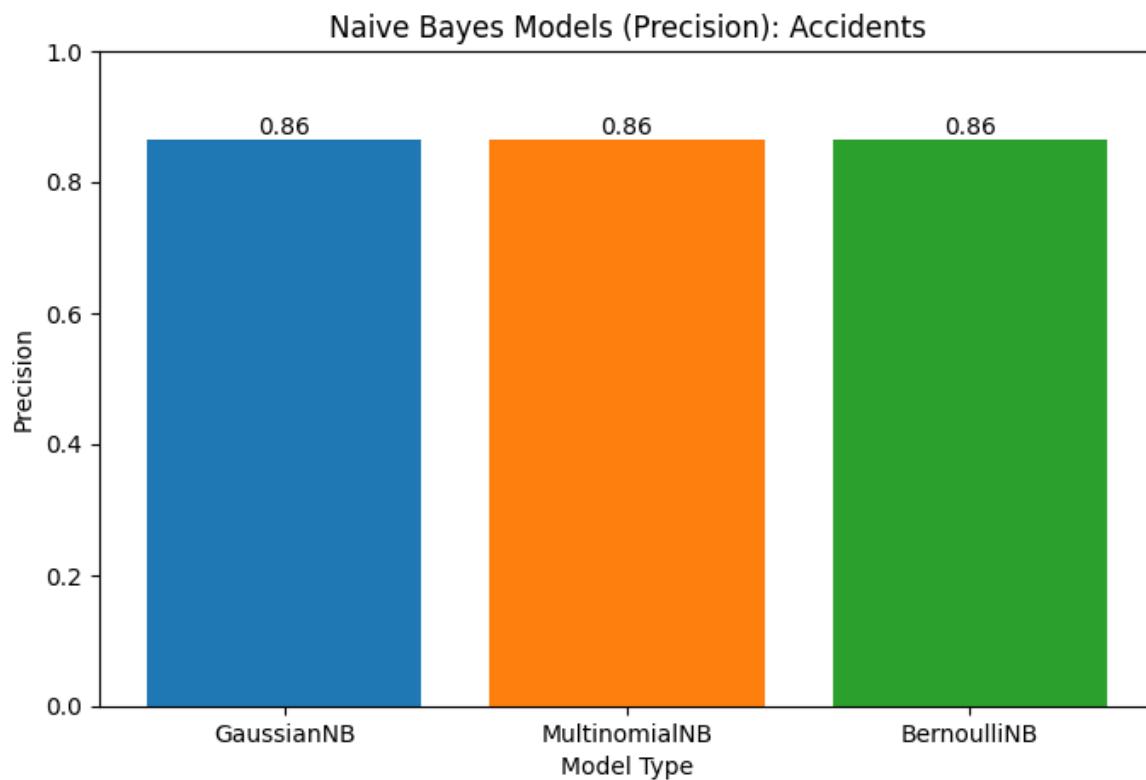


Naive Bayes Study

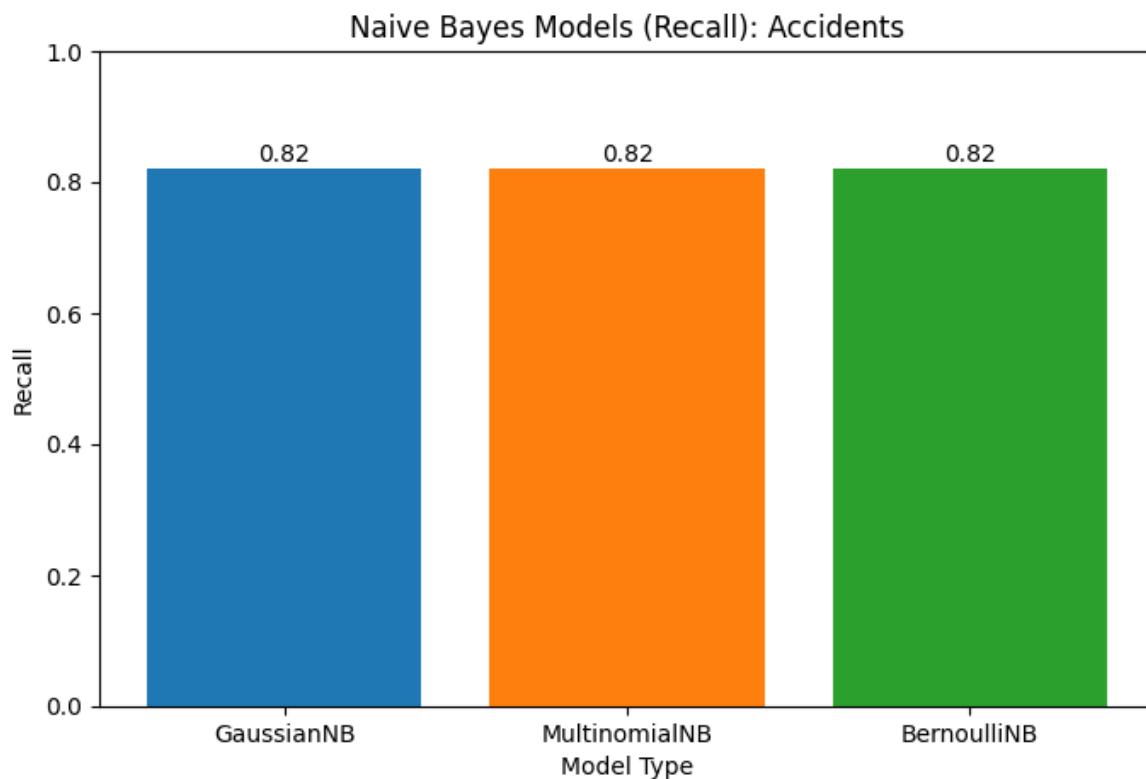
Accuracy



Precision

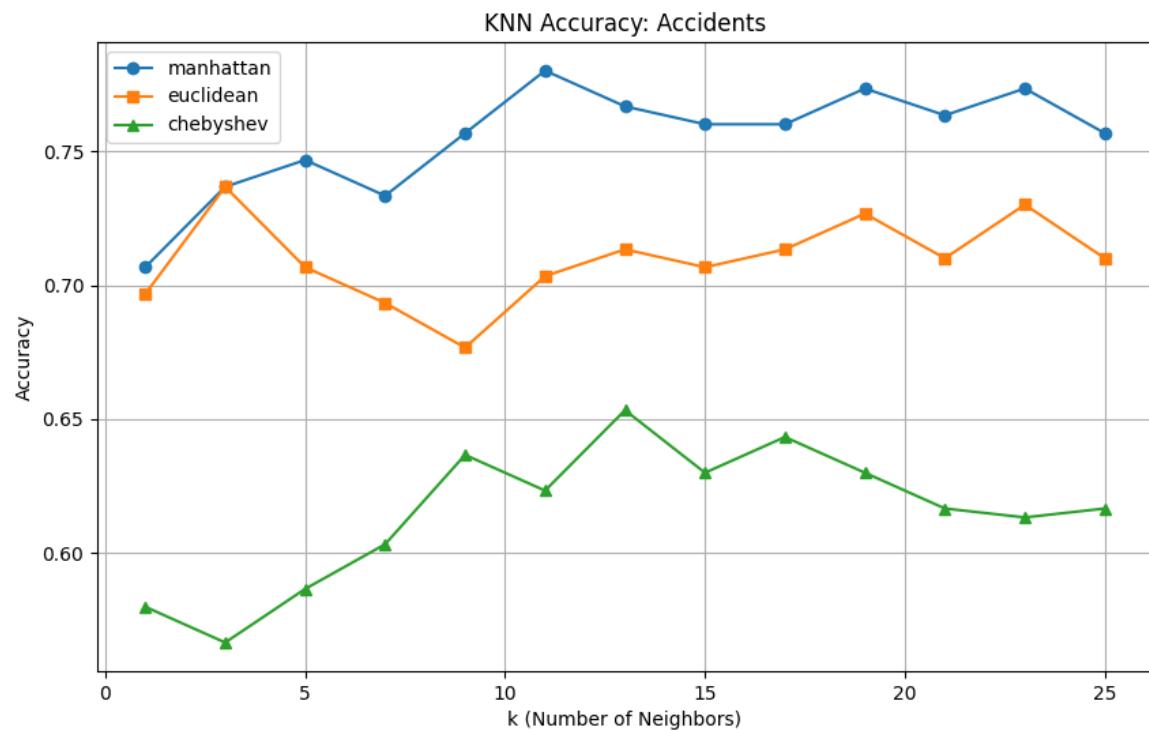


Recall

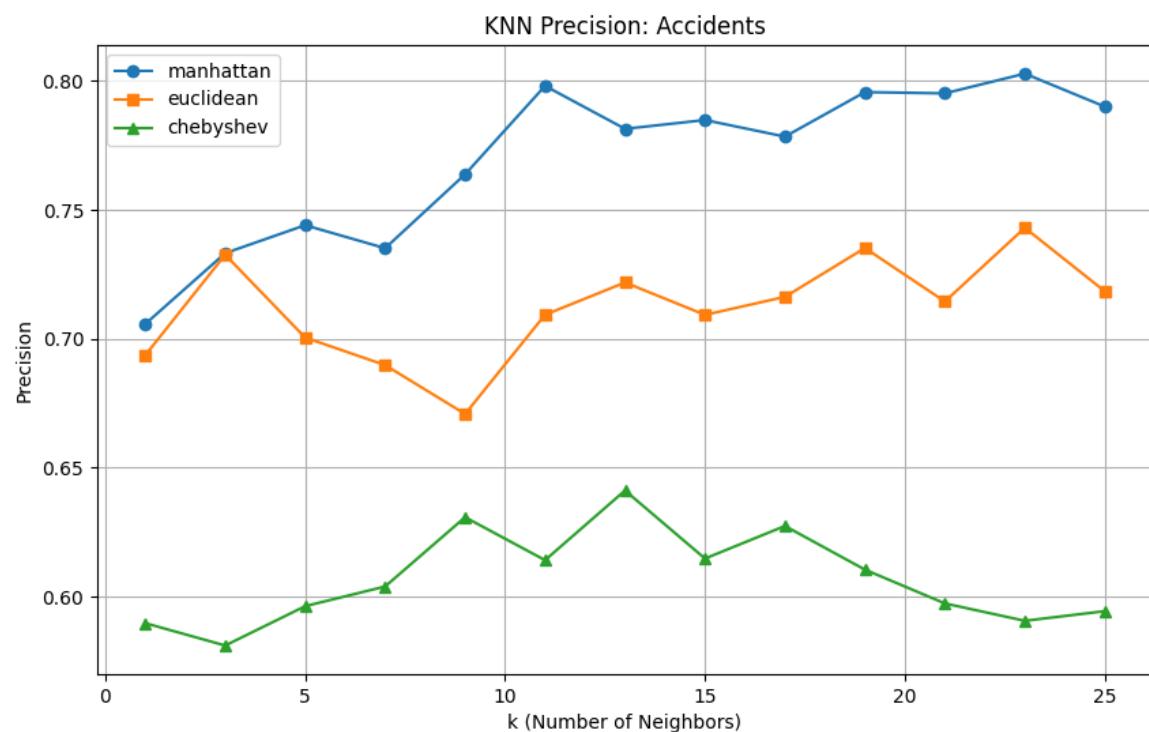


KNN Study

Accuracy



Precision



Recall

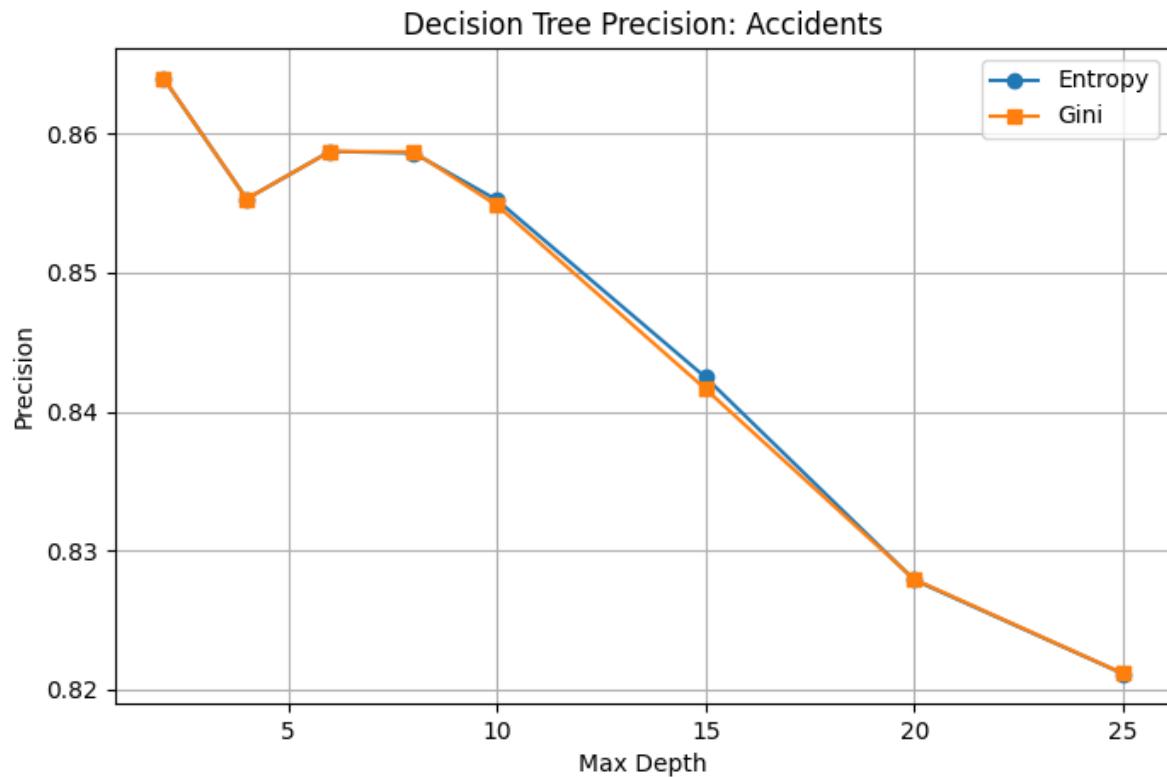


Decision Tree Study

Accuracy



Precision

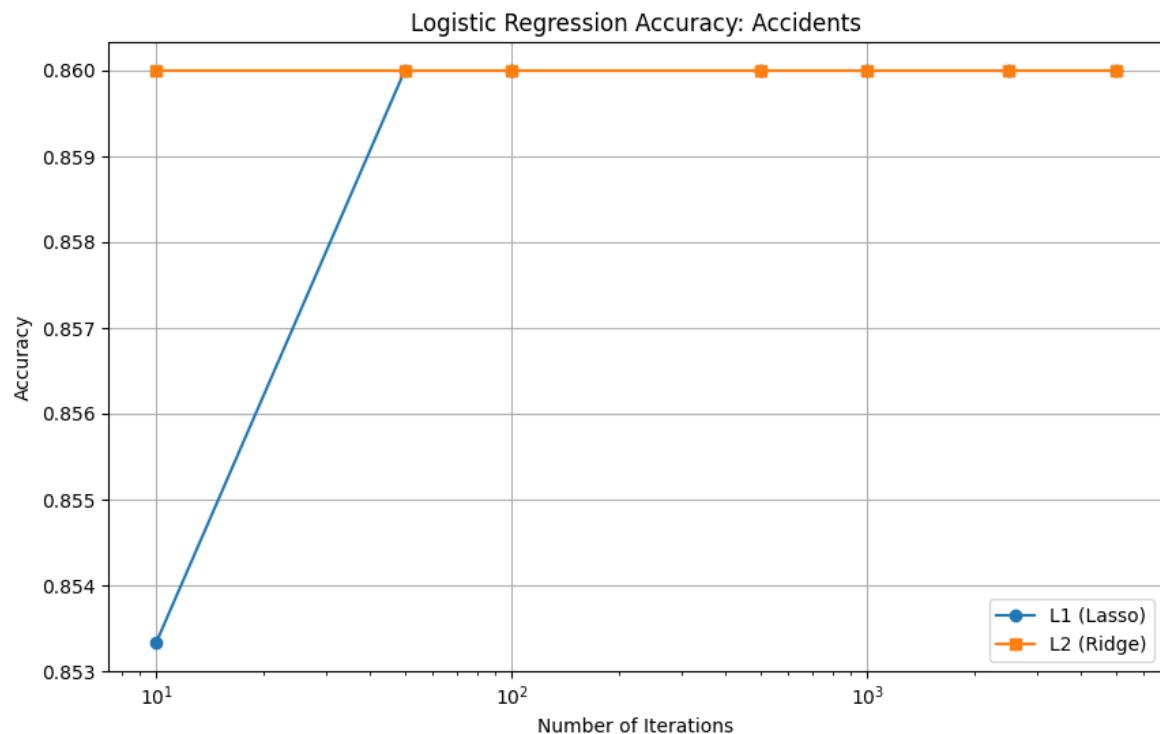


Recall

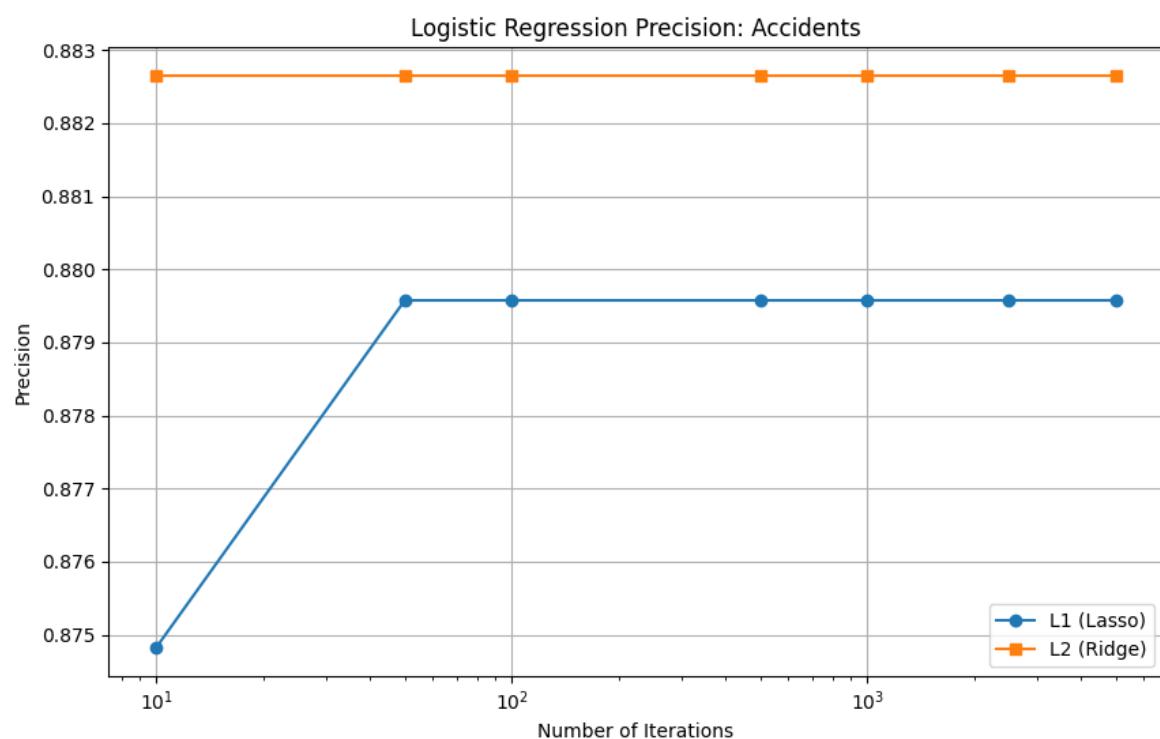


Logistic Regression Study

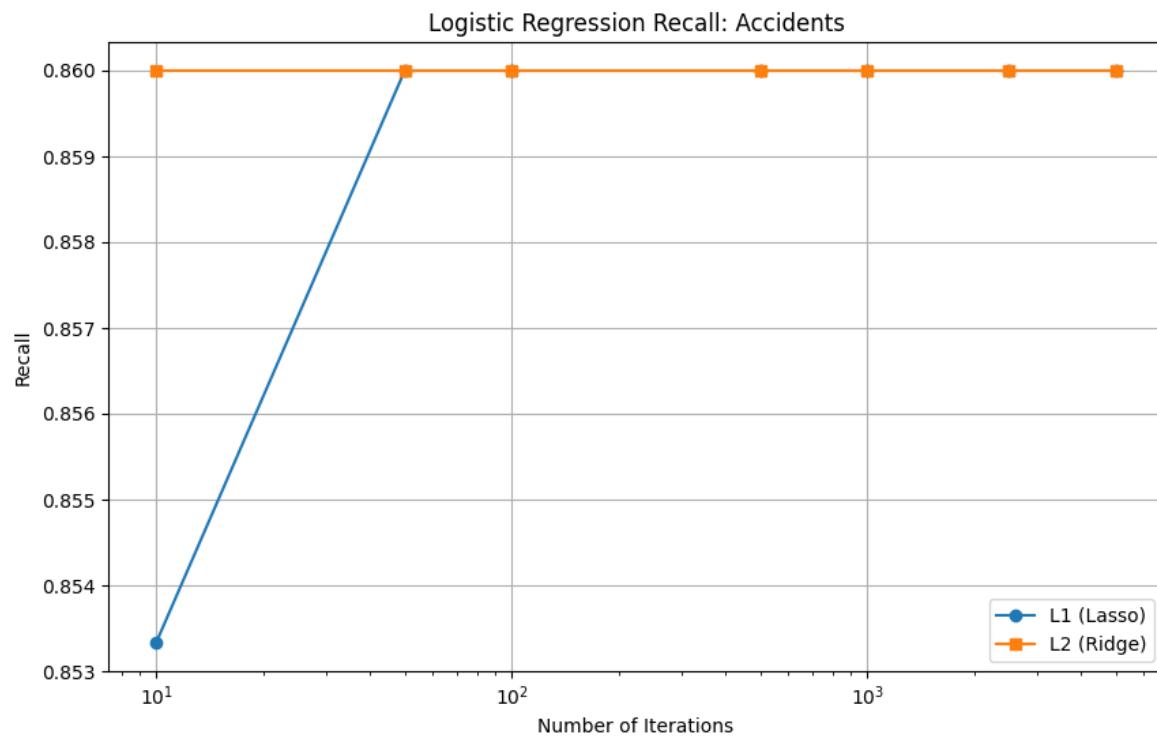
Accuracy



Precision

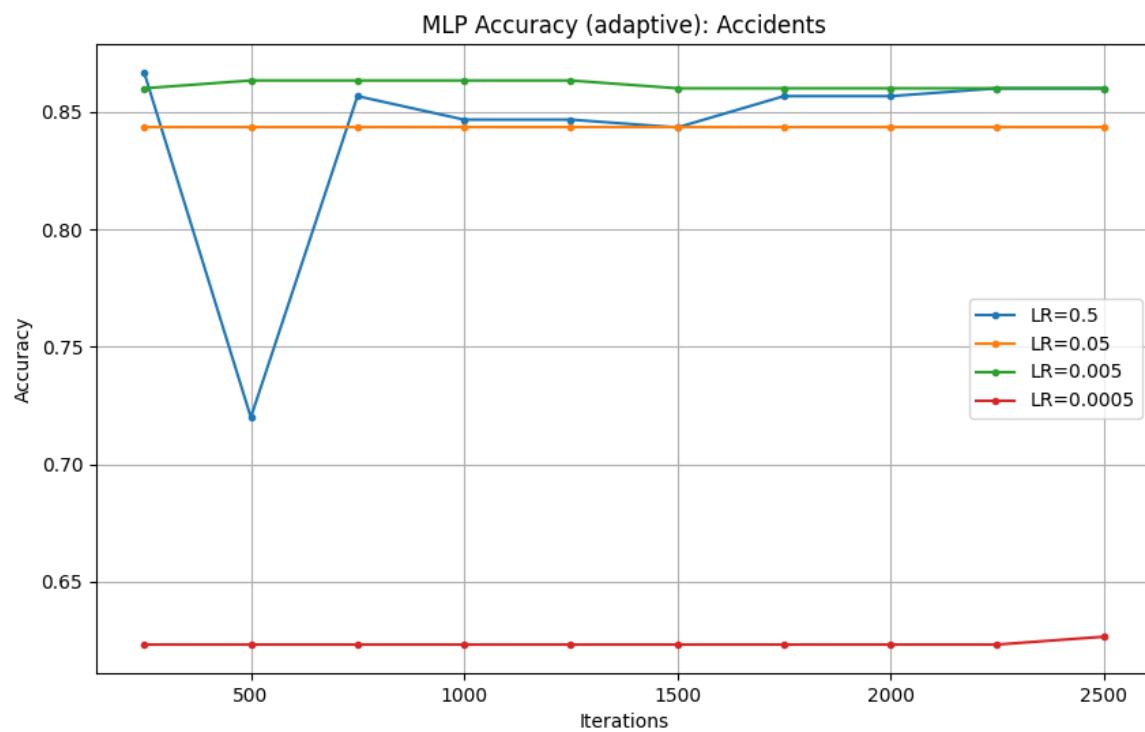


Recall

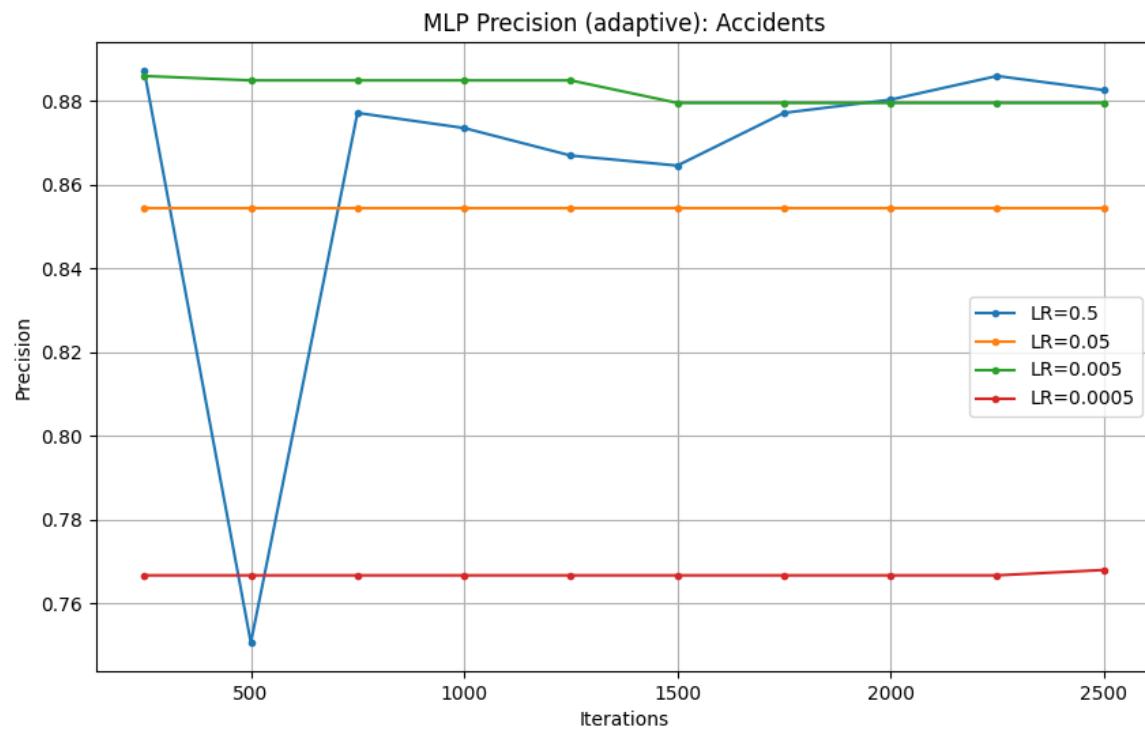


MLP Study

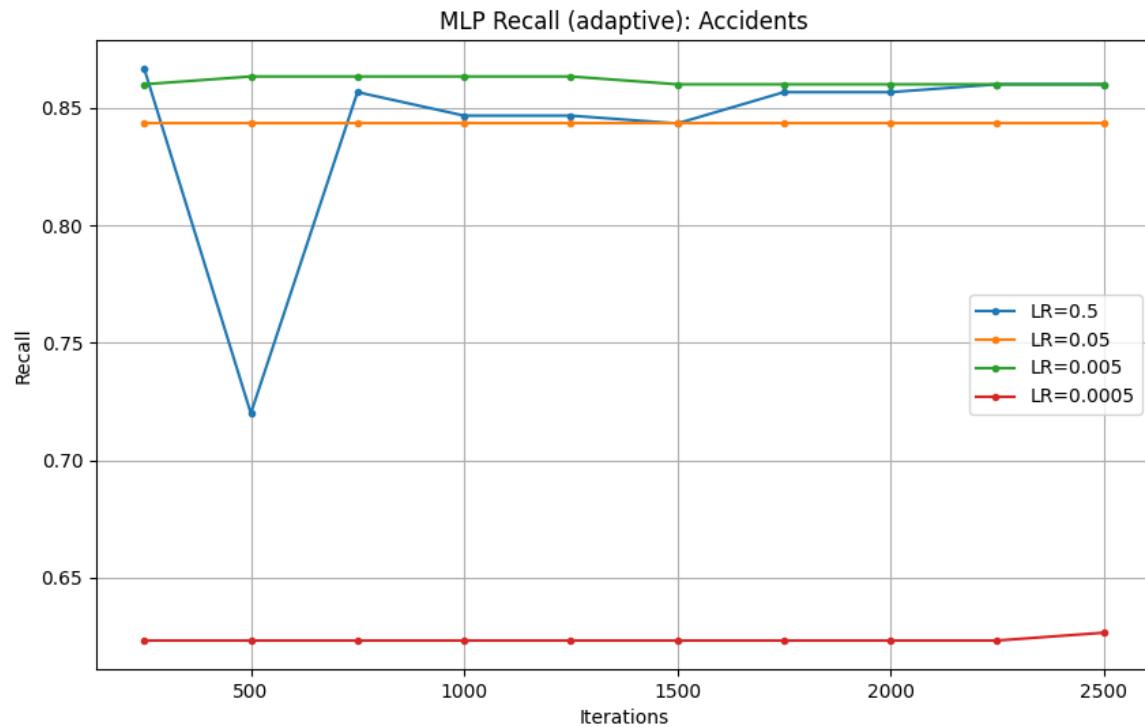
Adaptive Learning Rate - Accuracy



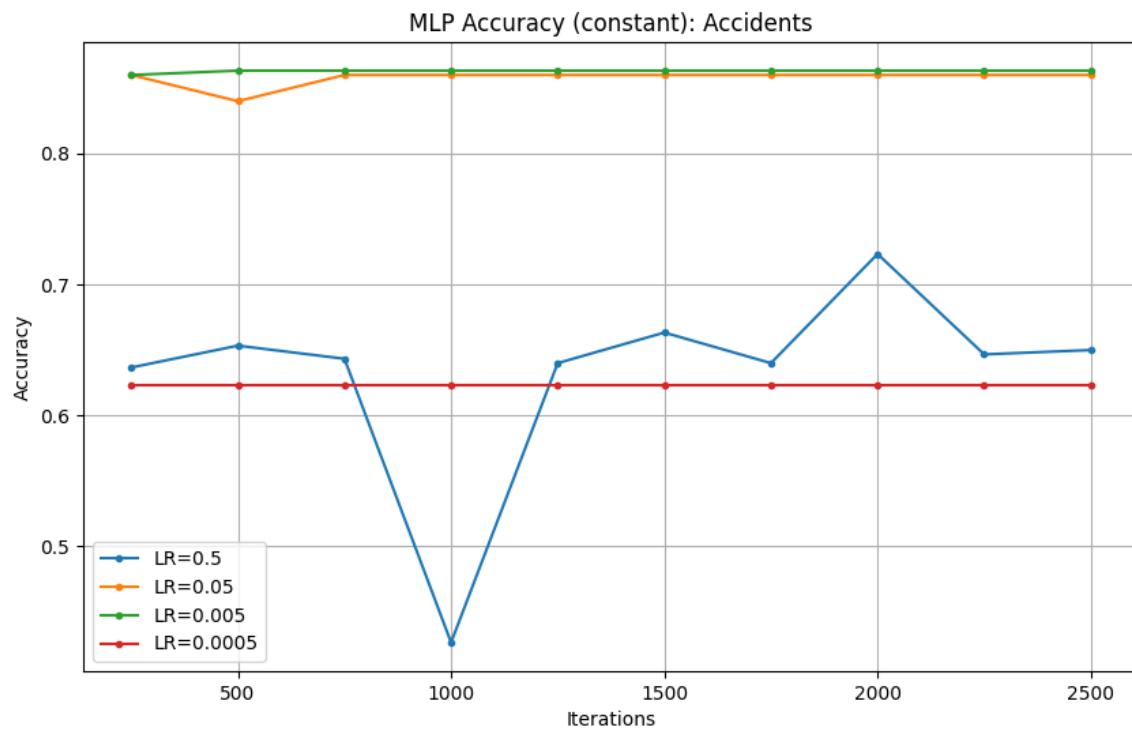
Adaptive Learning Rate - Precision



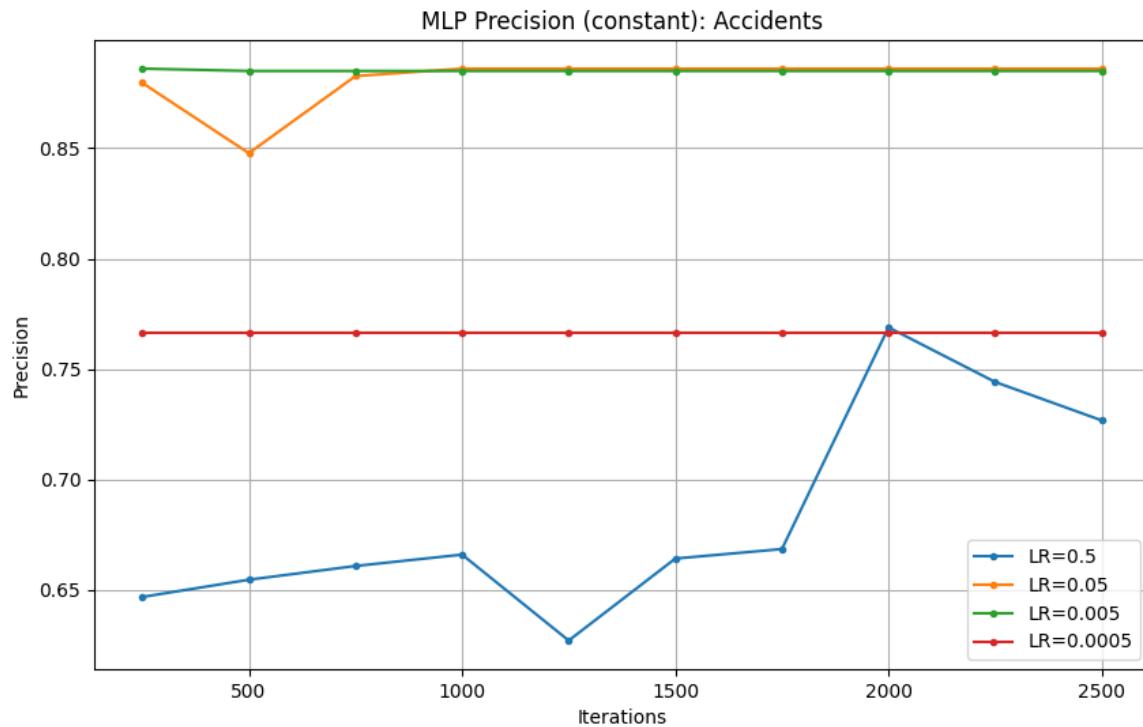
Adaptive Learning Rate - Recall



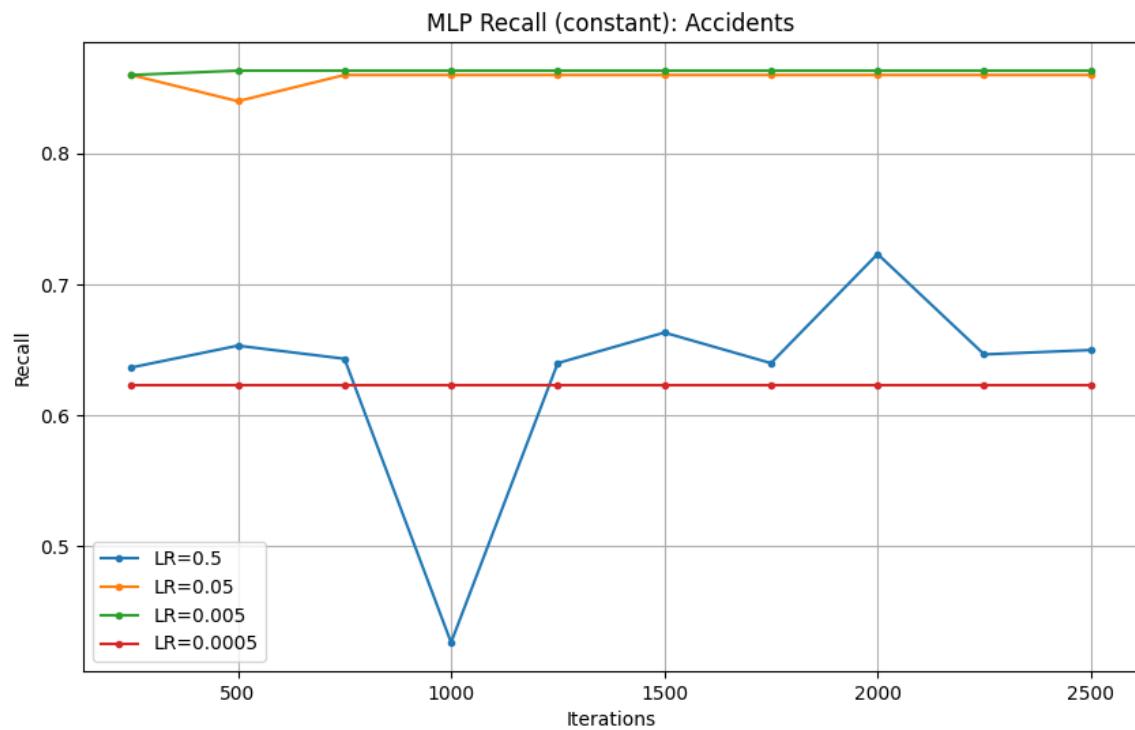
Constant Learning Rate - Accuracy



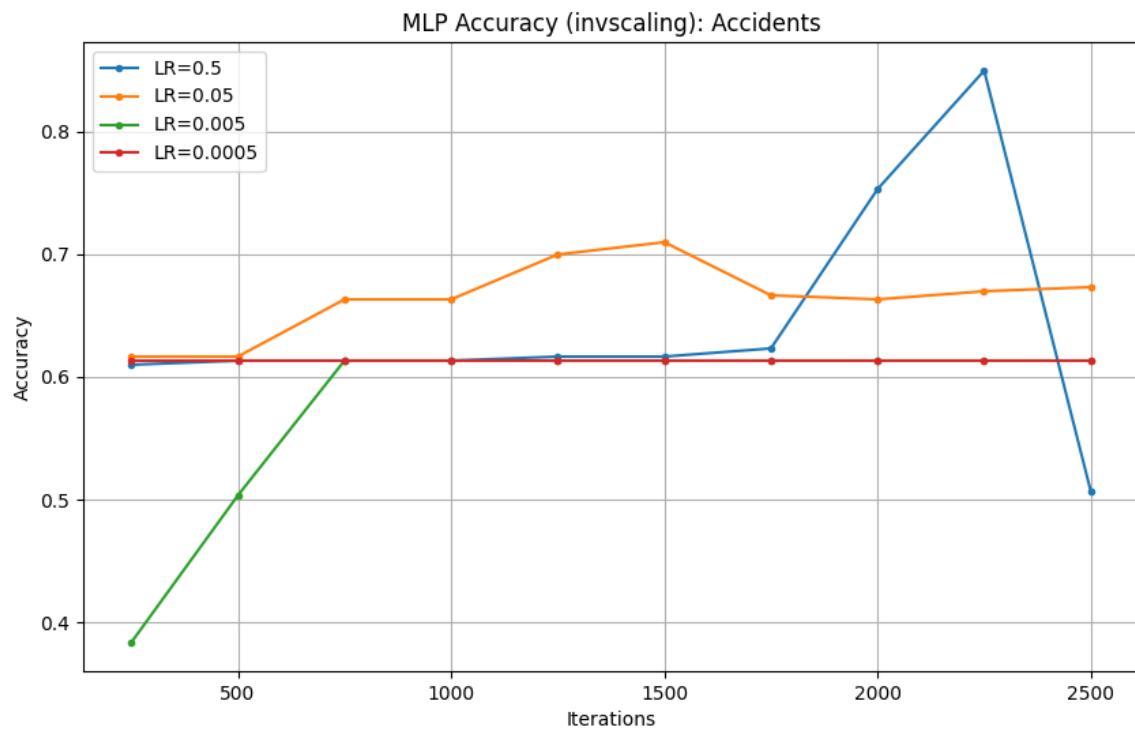
Constant Learning Rate - Precision



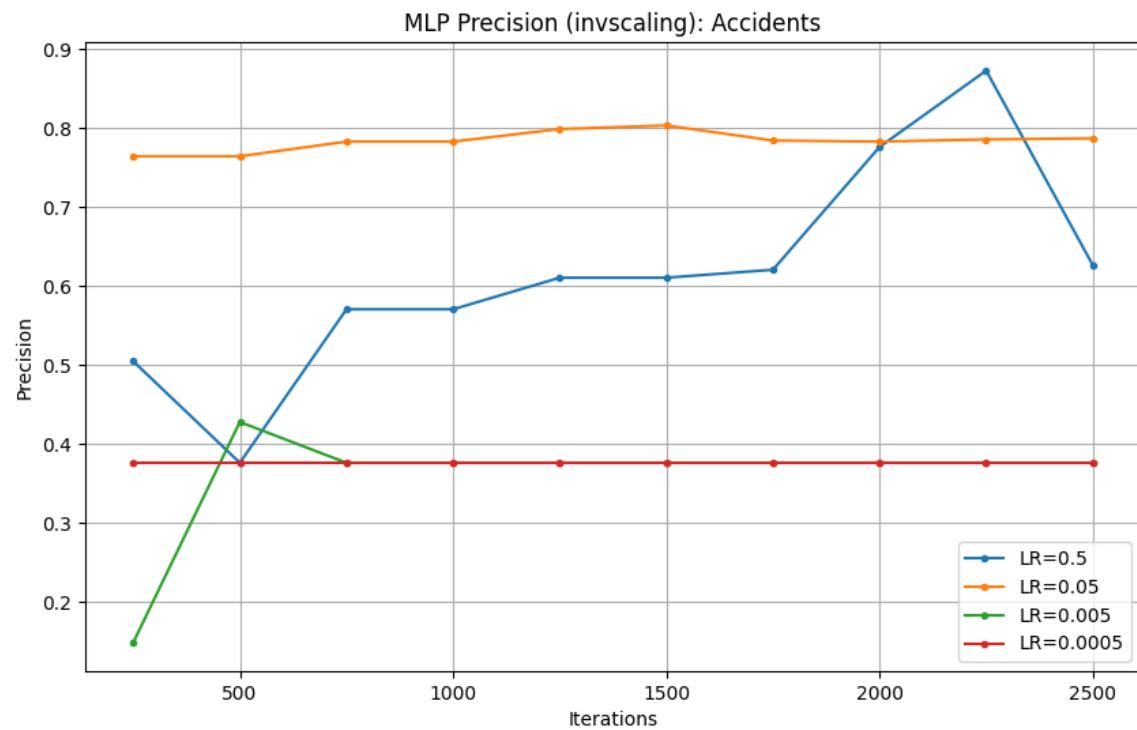
Constant Learning Rate - Recall



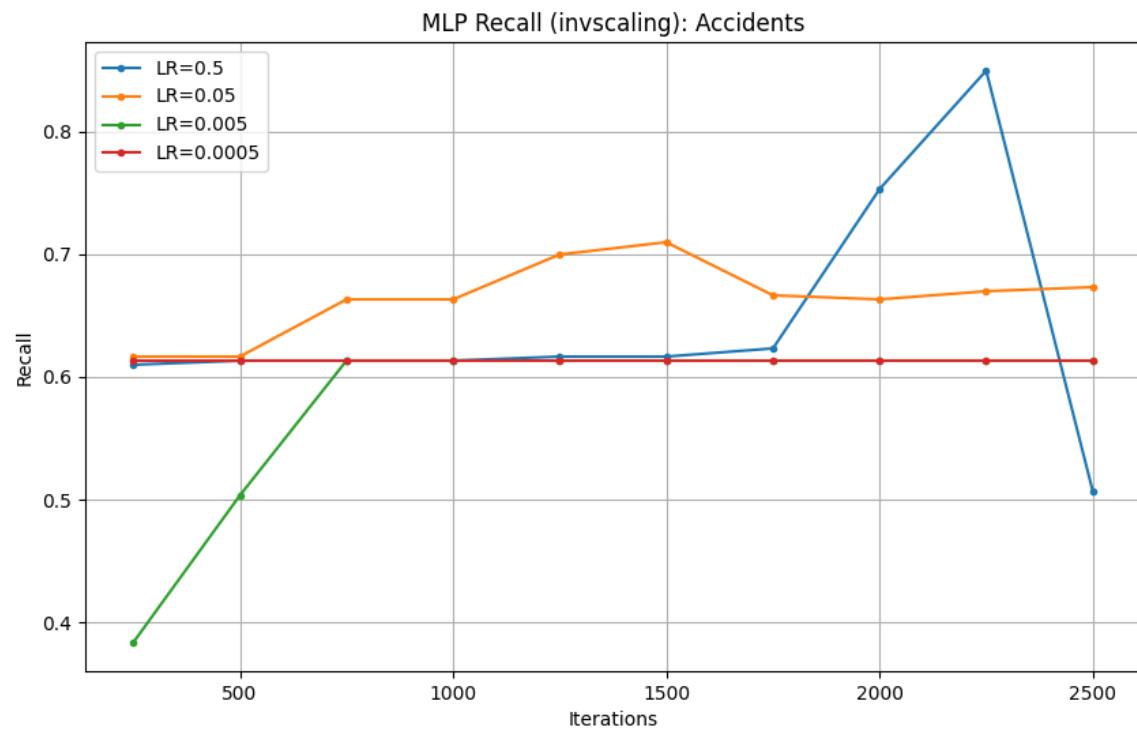
Inverse Scaling Learning Rate - Accuracy



Inverse Scaling Learning Rate - Precision



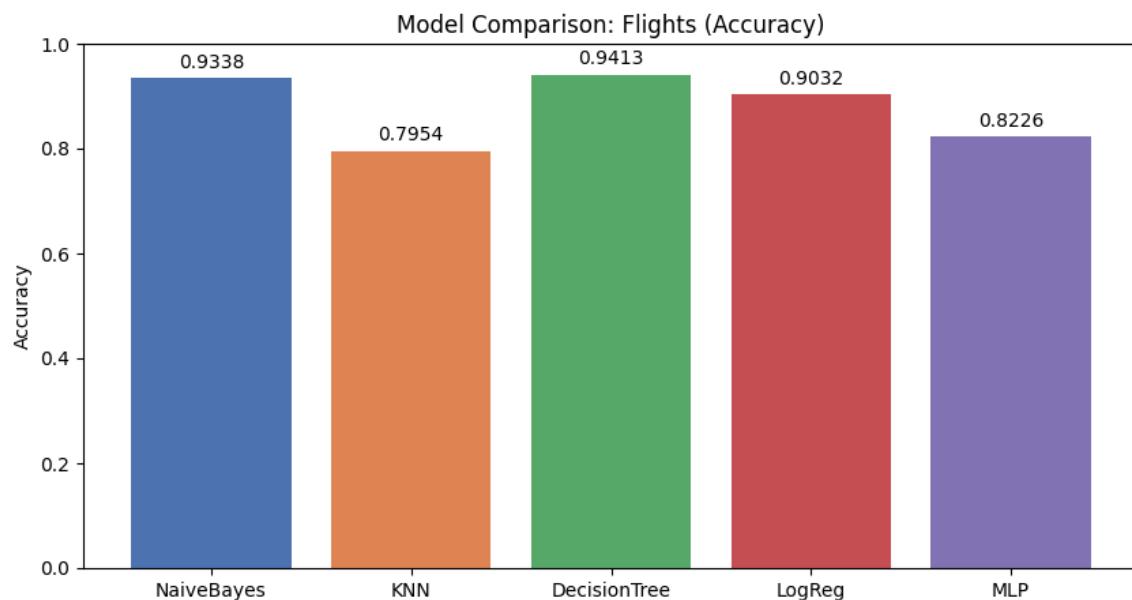
Inverse Scaling Learning Rate - Recall



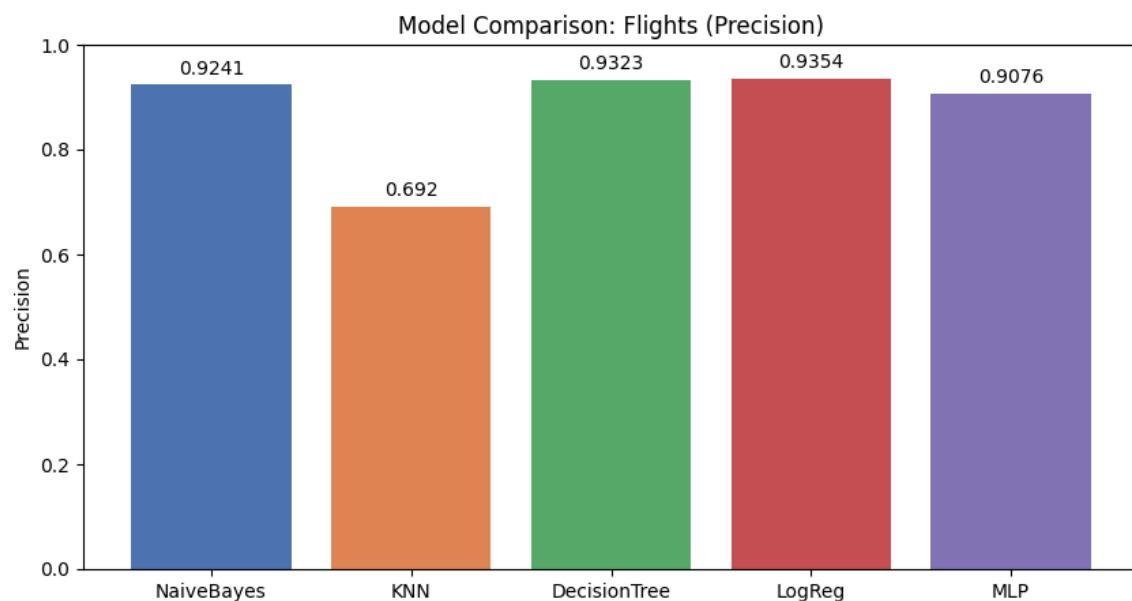
Flights Dataset

Final Model Comparison

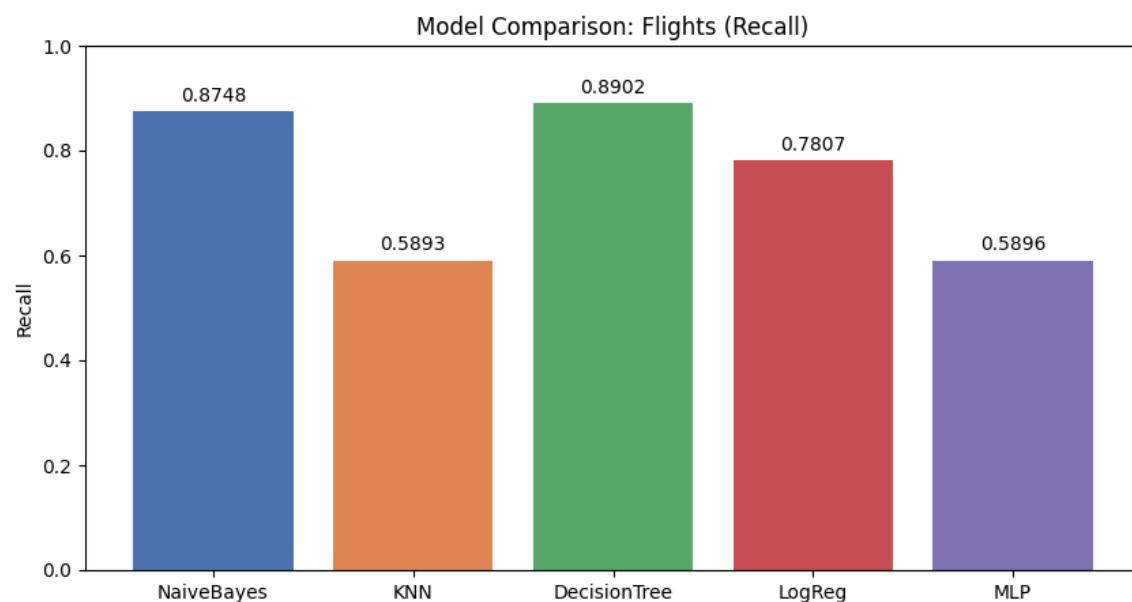
Accuracy Comparison



Precision Comparison

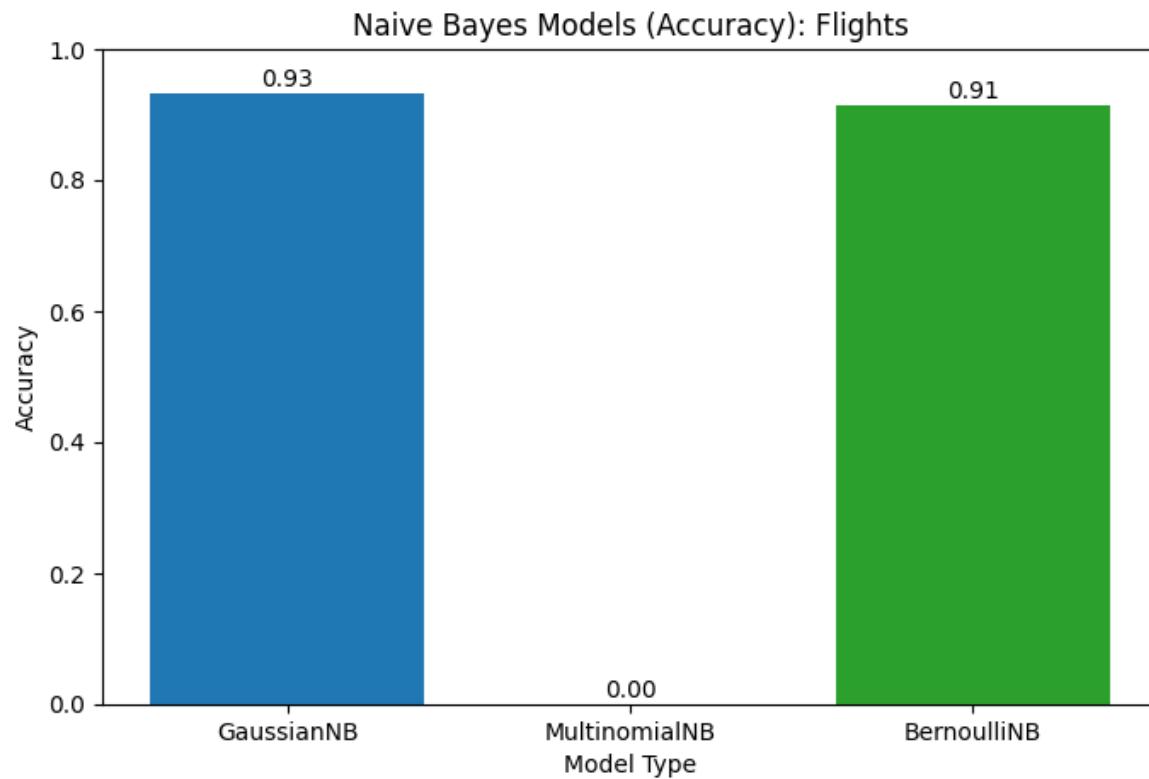


Recall Comparison

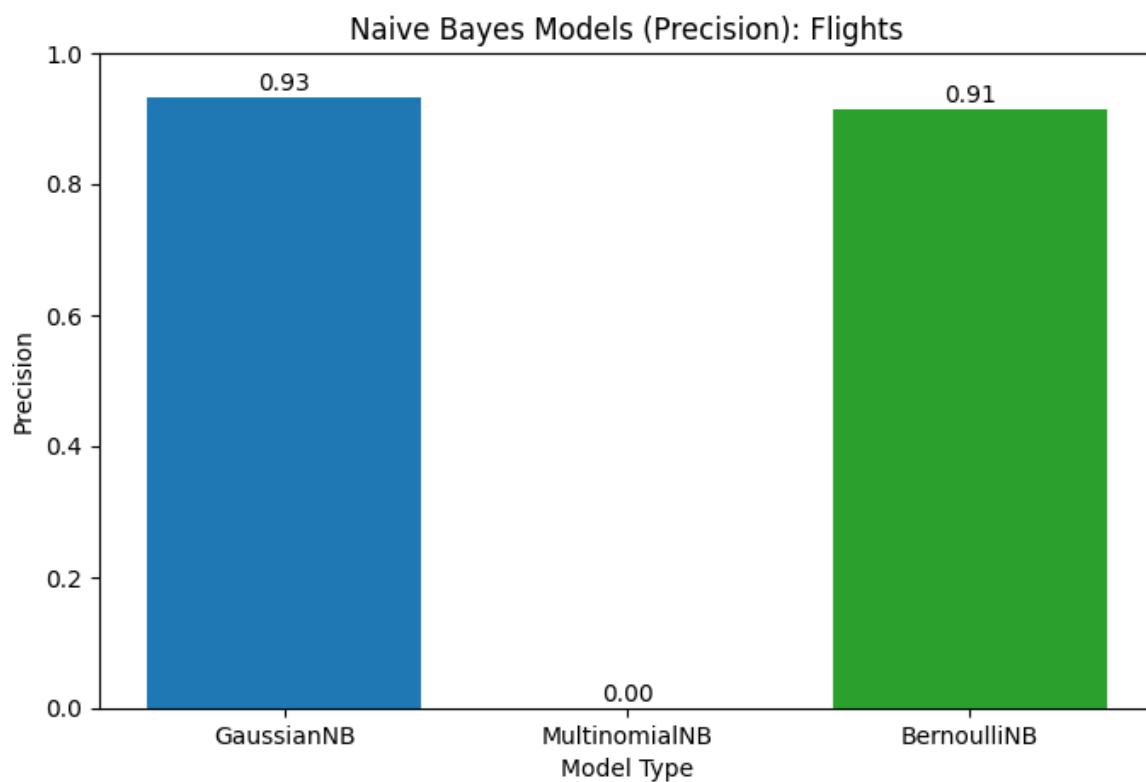


Naive Bayes Study

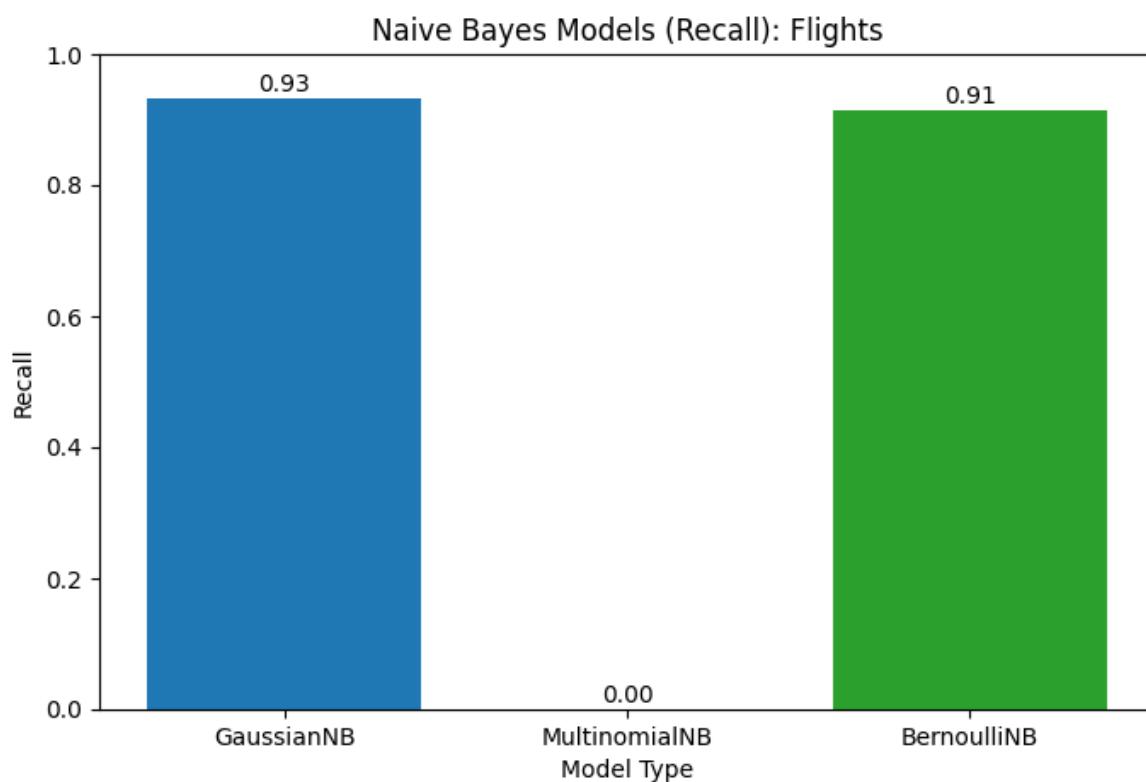
Accuracy



Precision

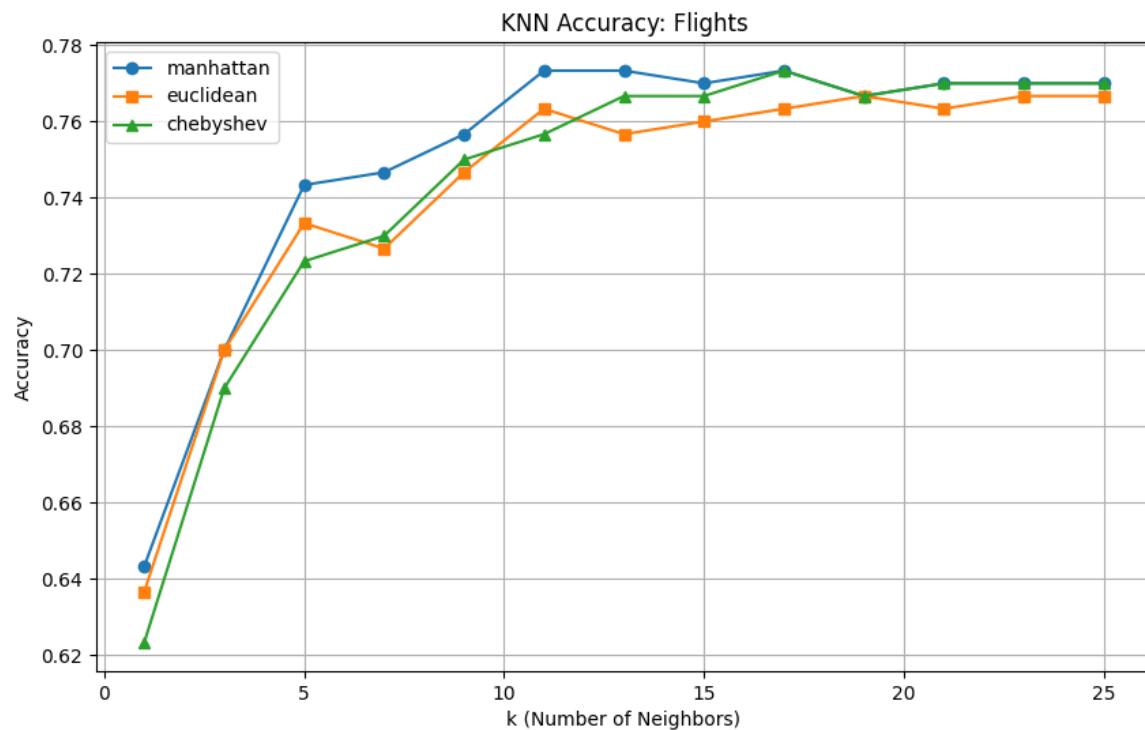


Recall

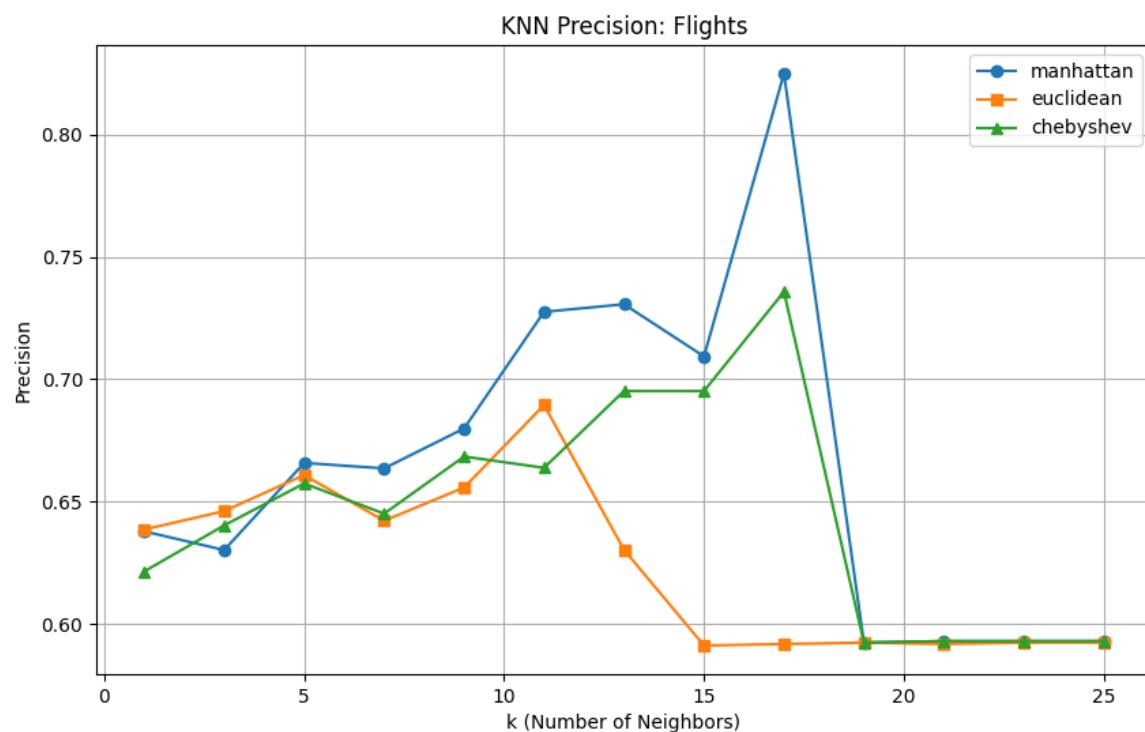


KNN Study

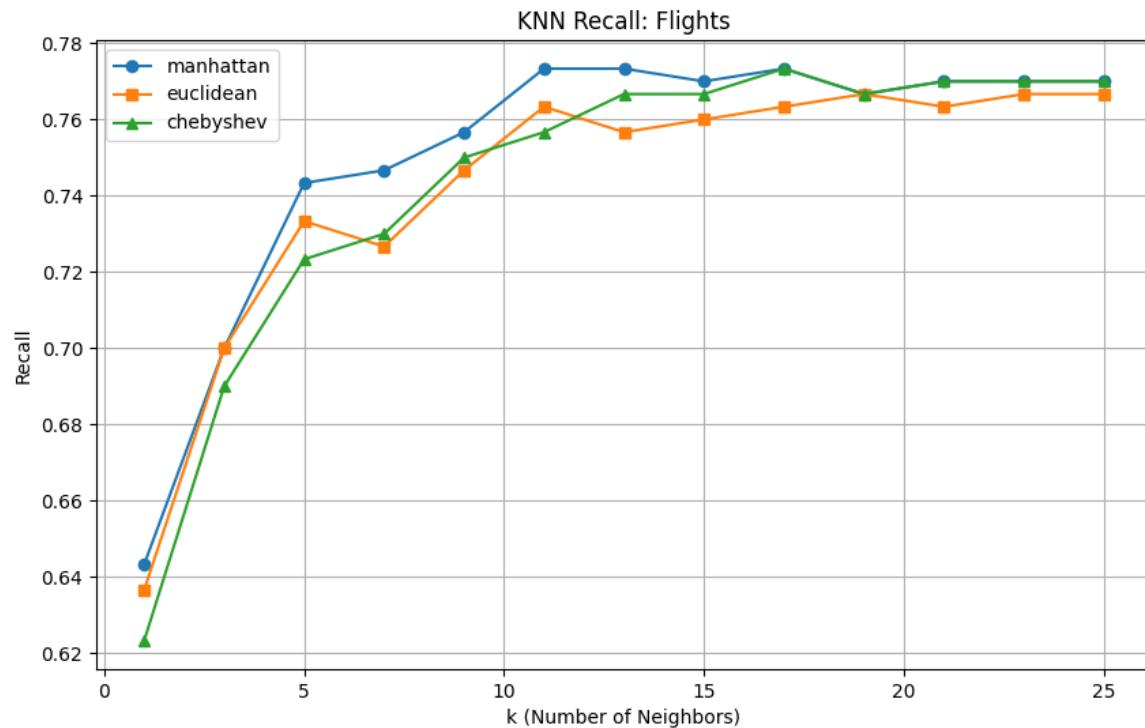
Accuracy



Precision

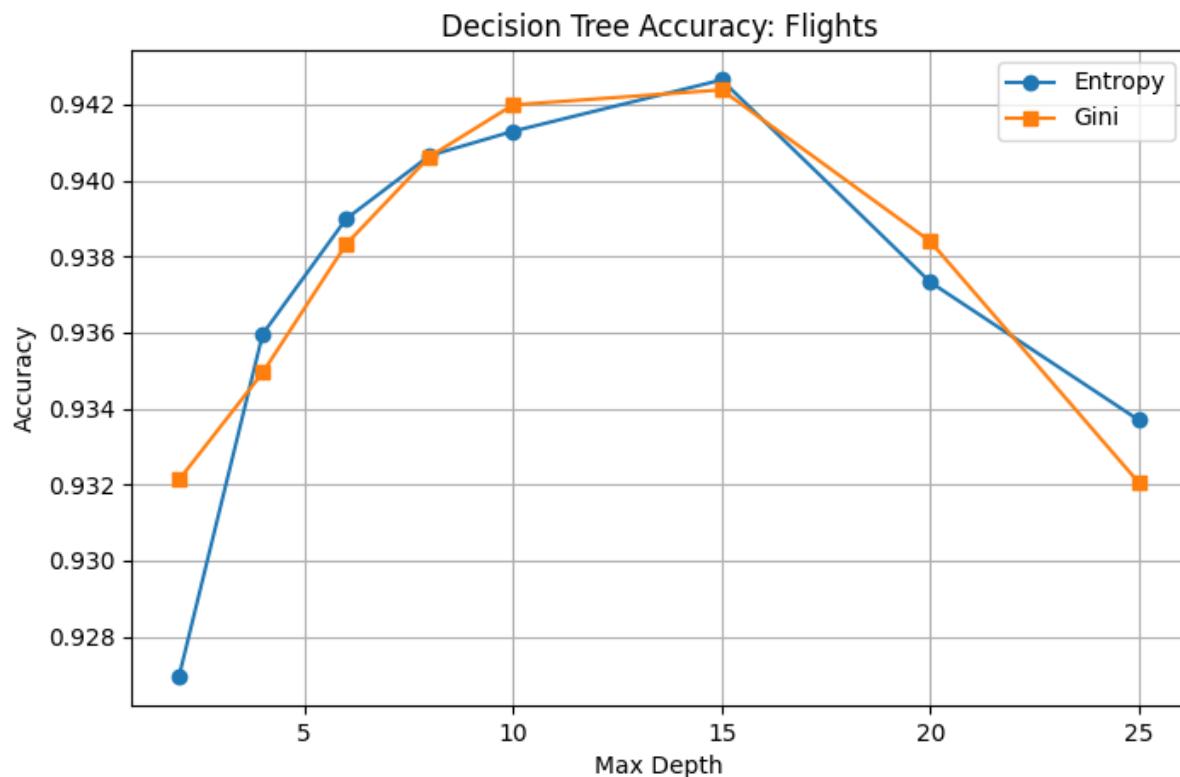


Recall

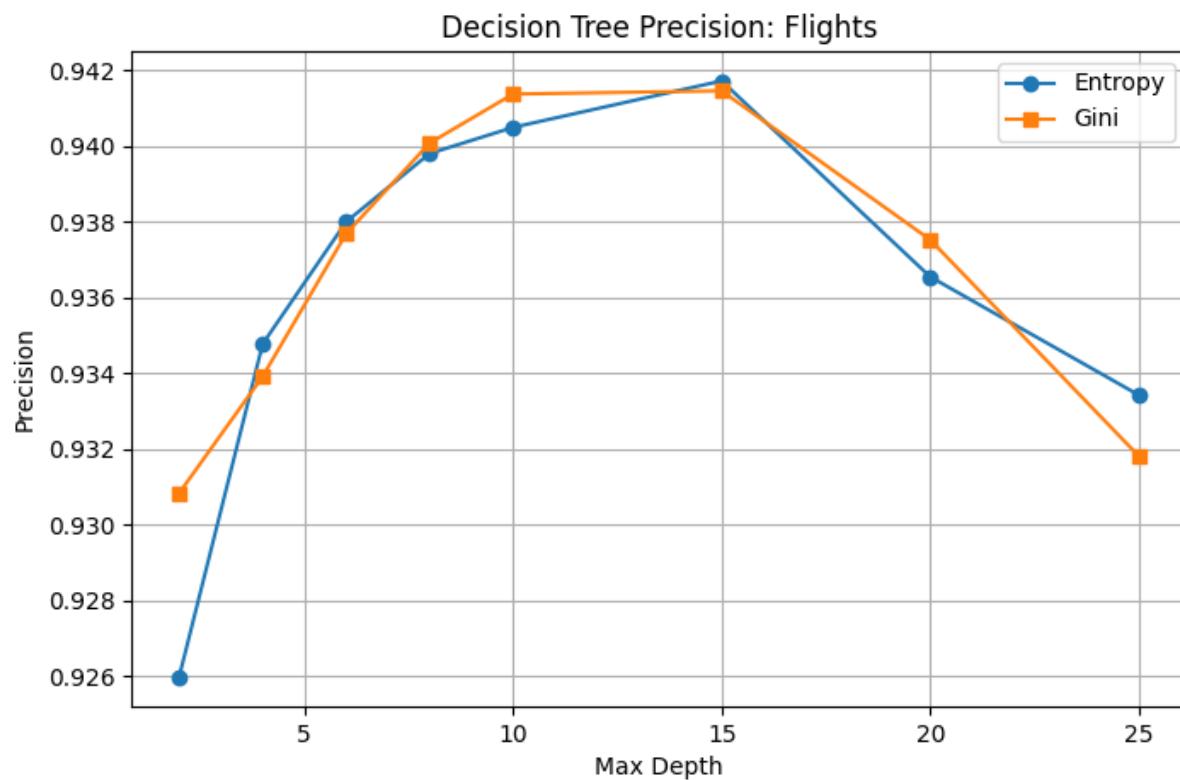


Decision Tree Study

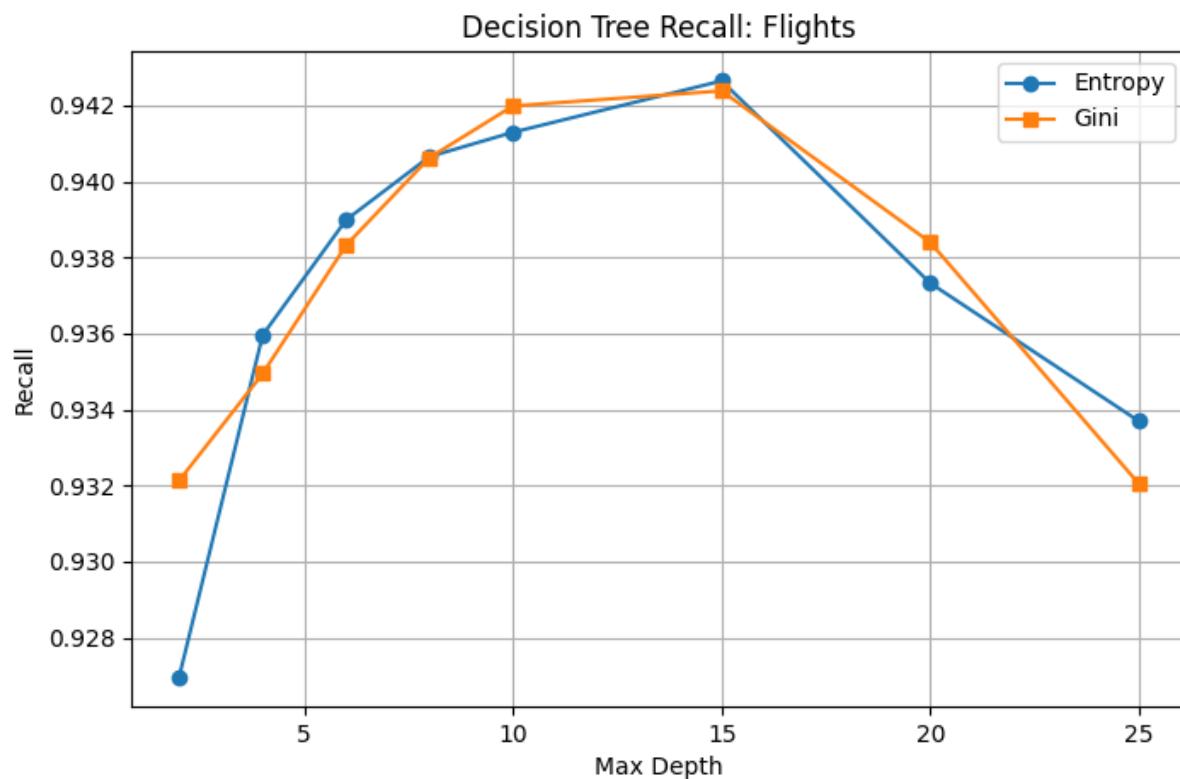
Accuracy



Precision

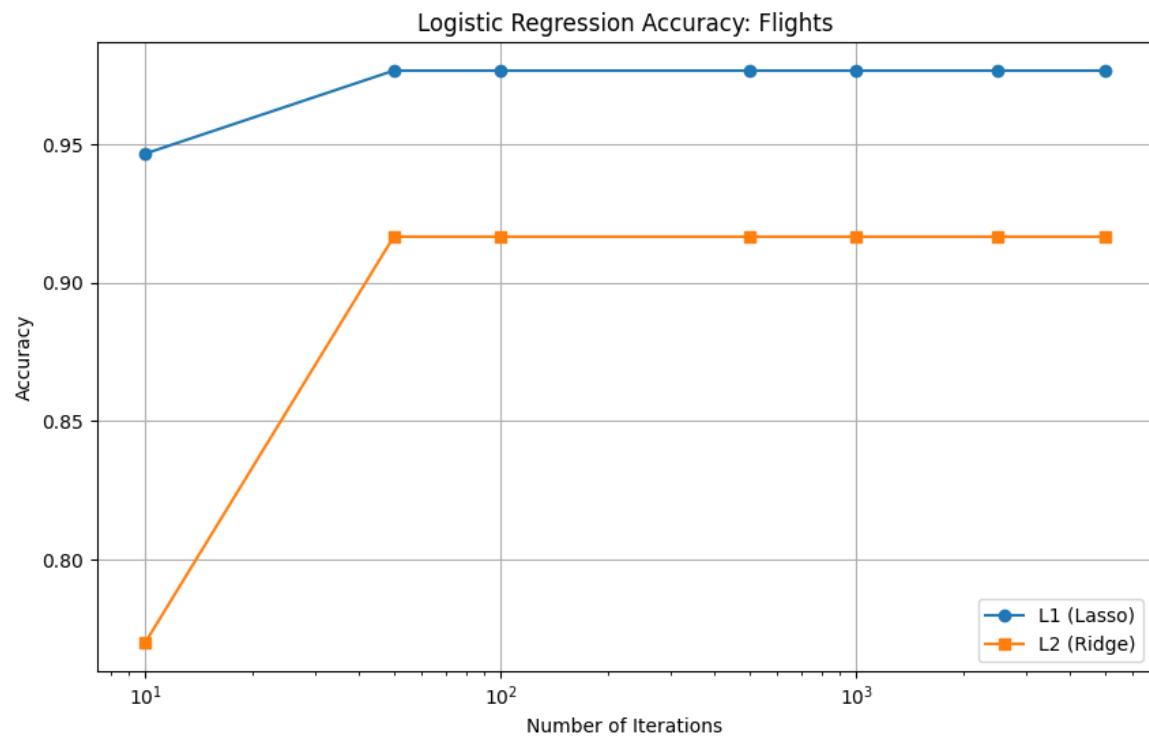


Recall

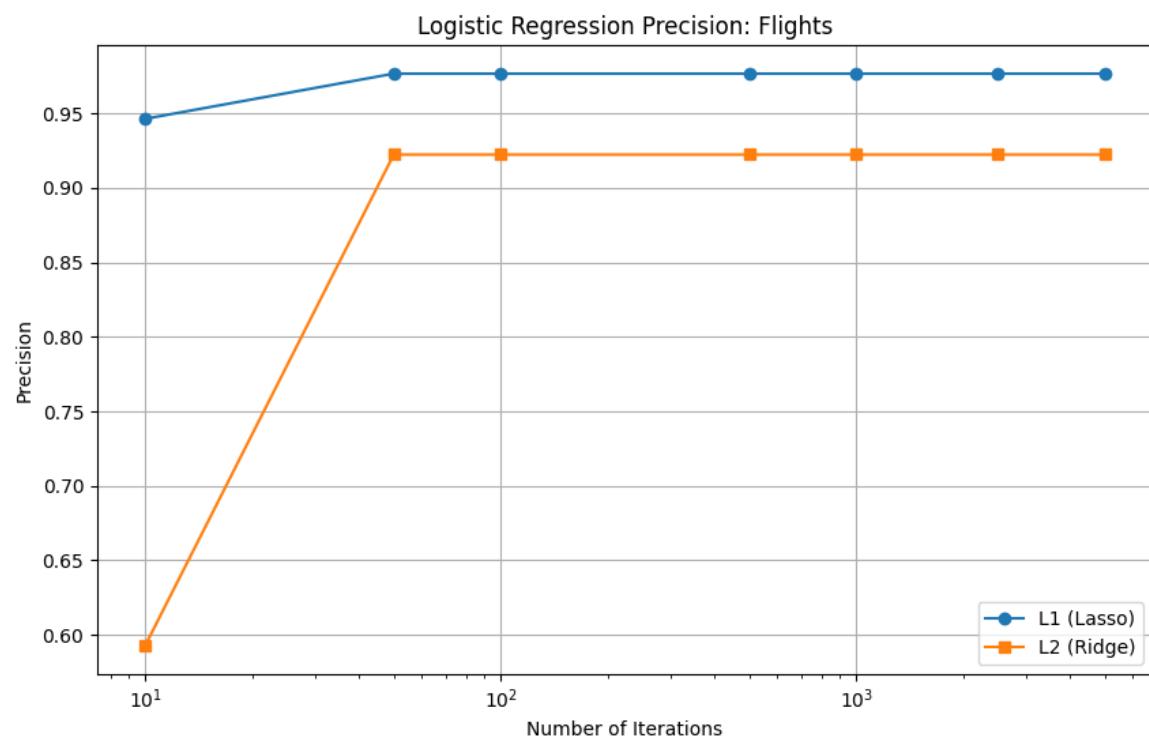


Logistic Regression Study

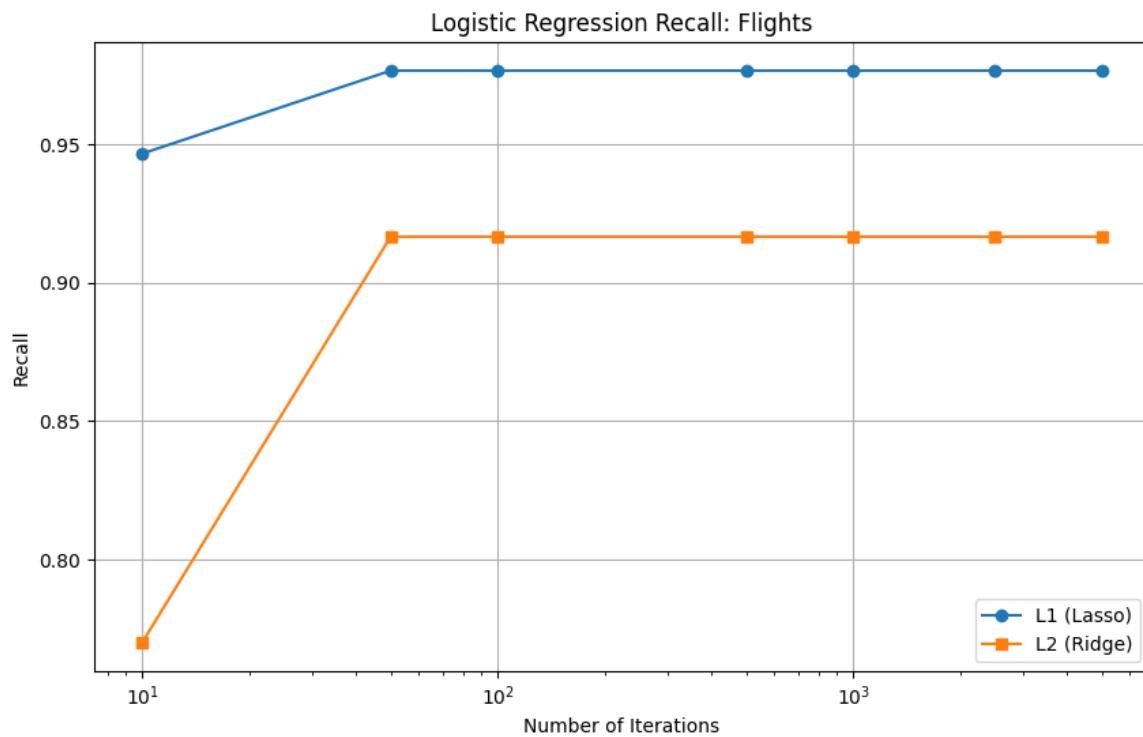
Accuracy



Precision

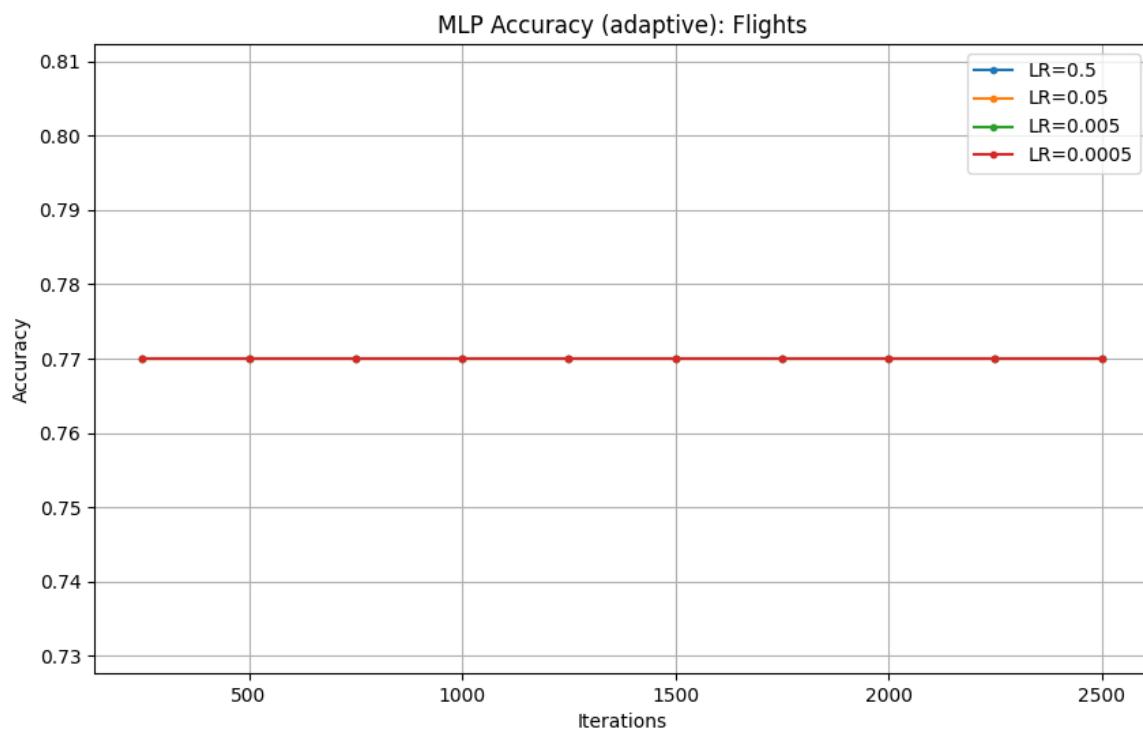


Recall

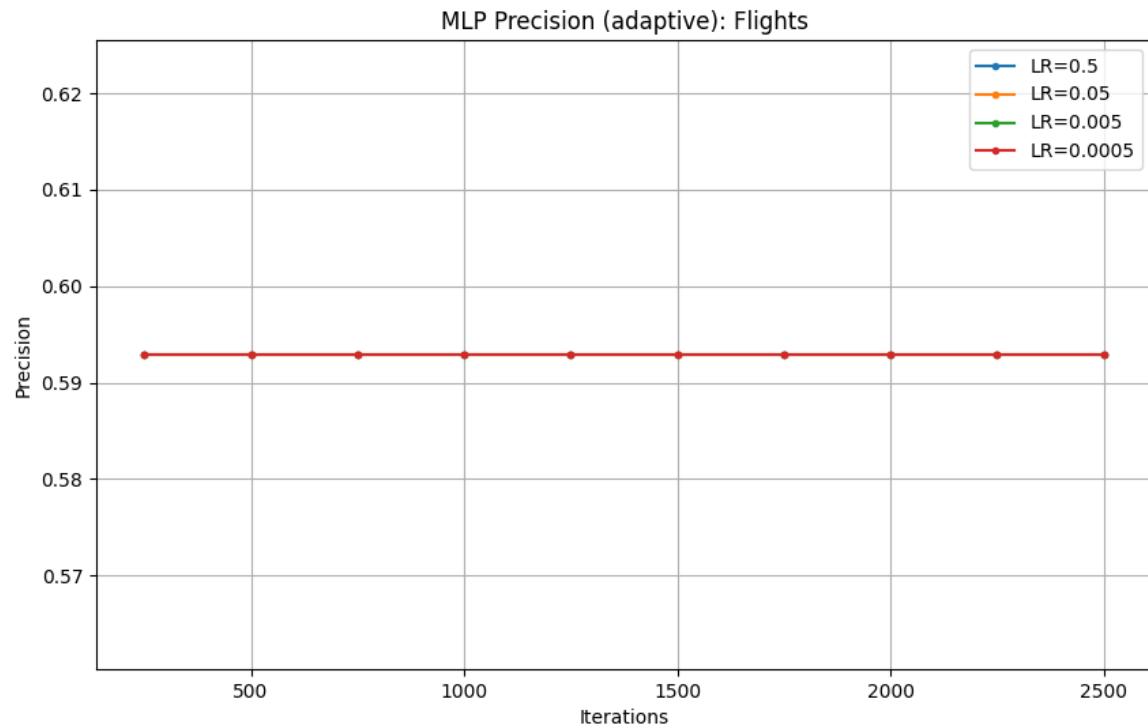


MLP Study

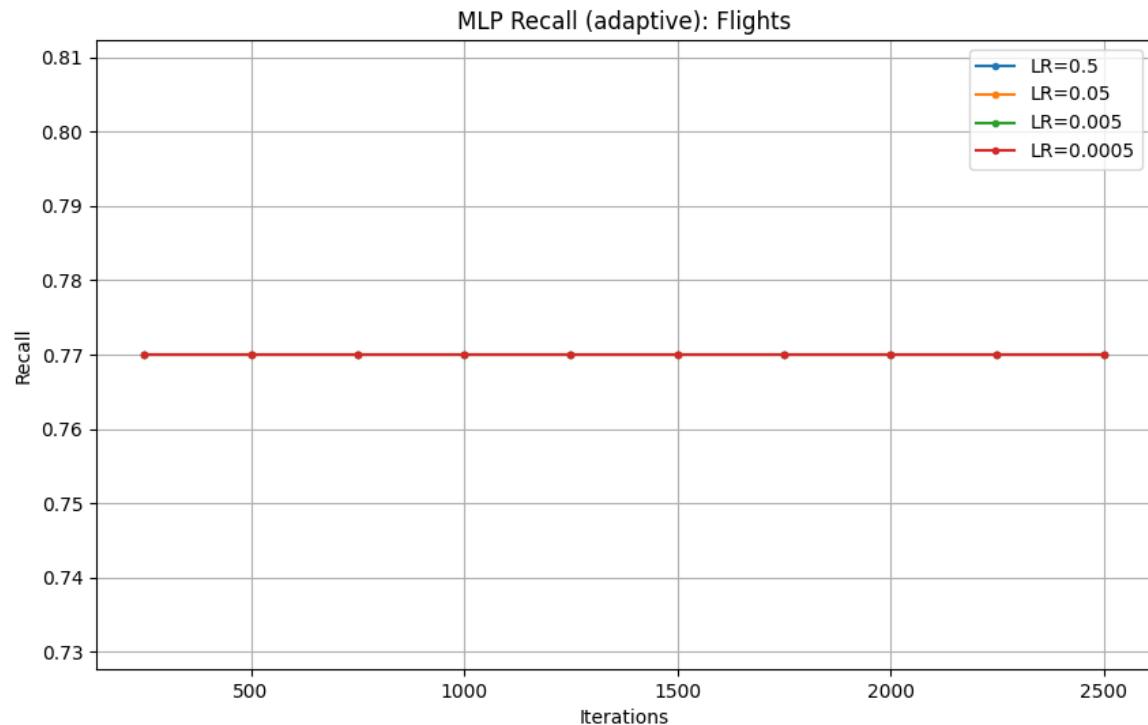
Adaptive Learning Rate - Accuracy



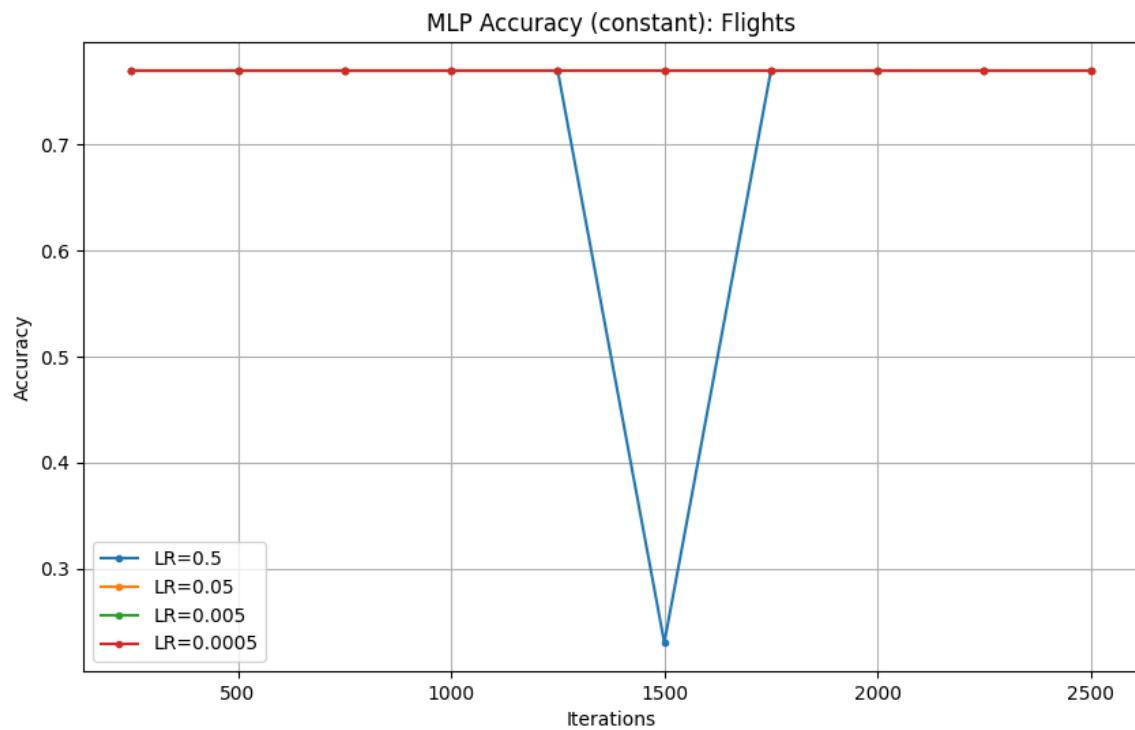
Adaptive Learning Rate - Precision



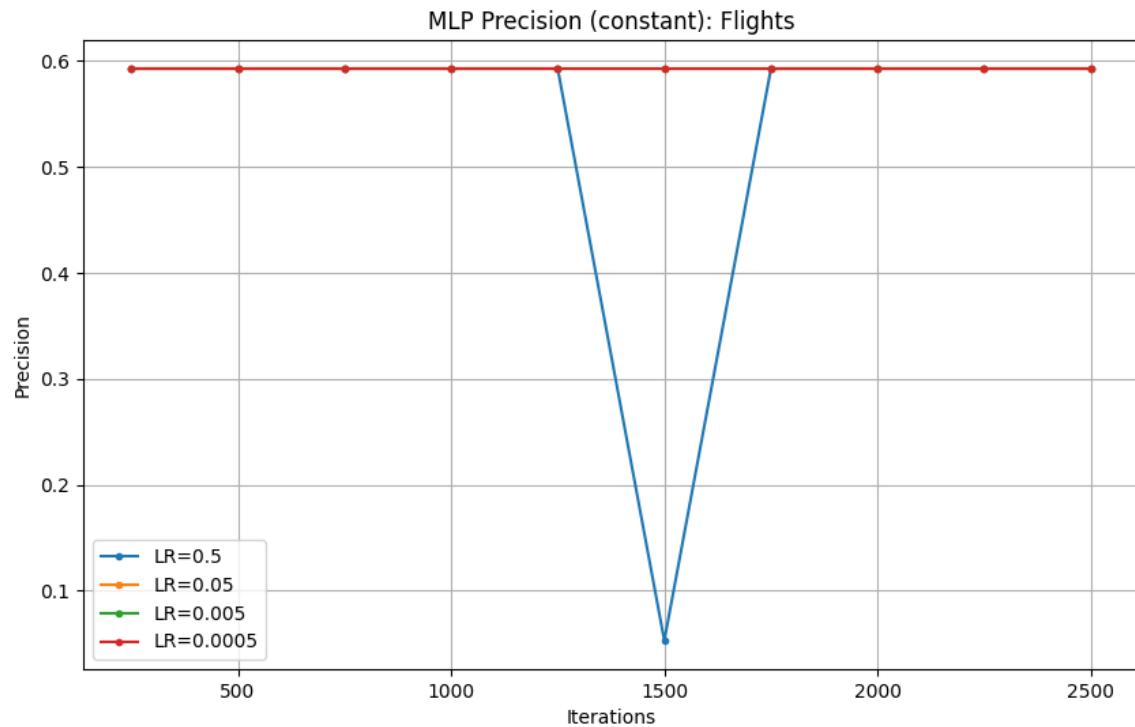
Adaptive Learning Rate - Recall



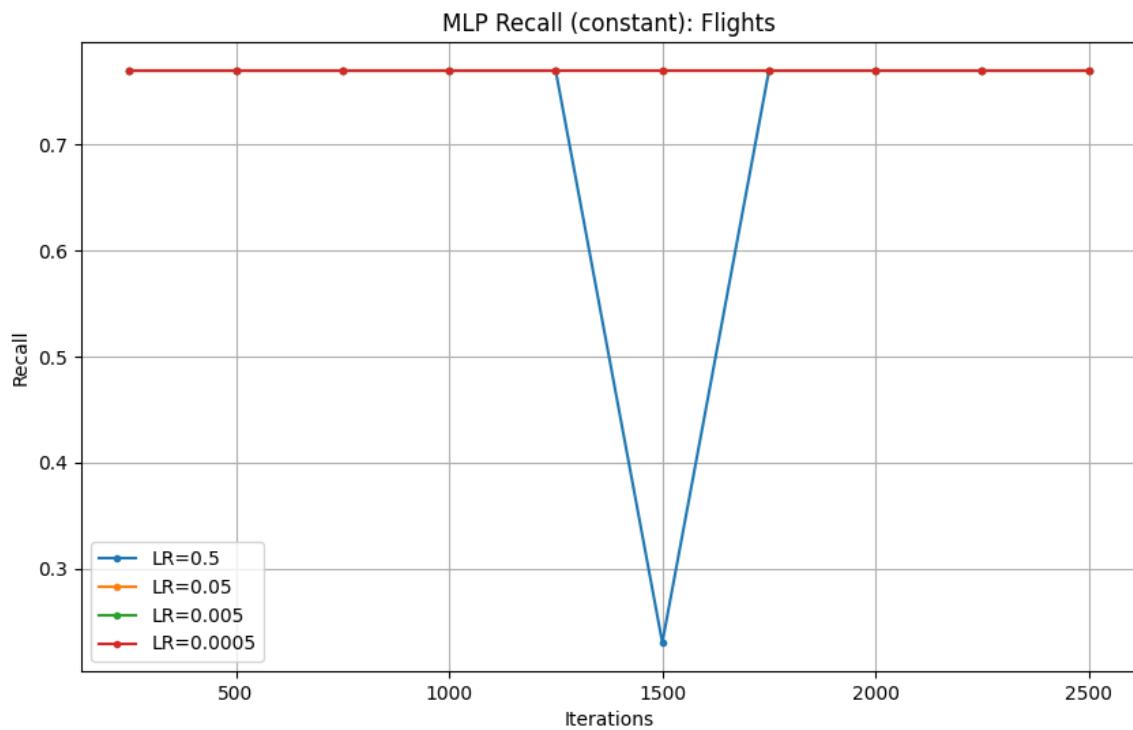
Constant Learning Rate - Accuracy



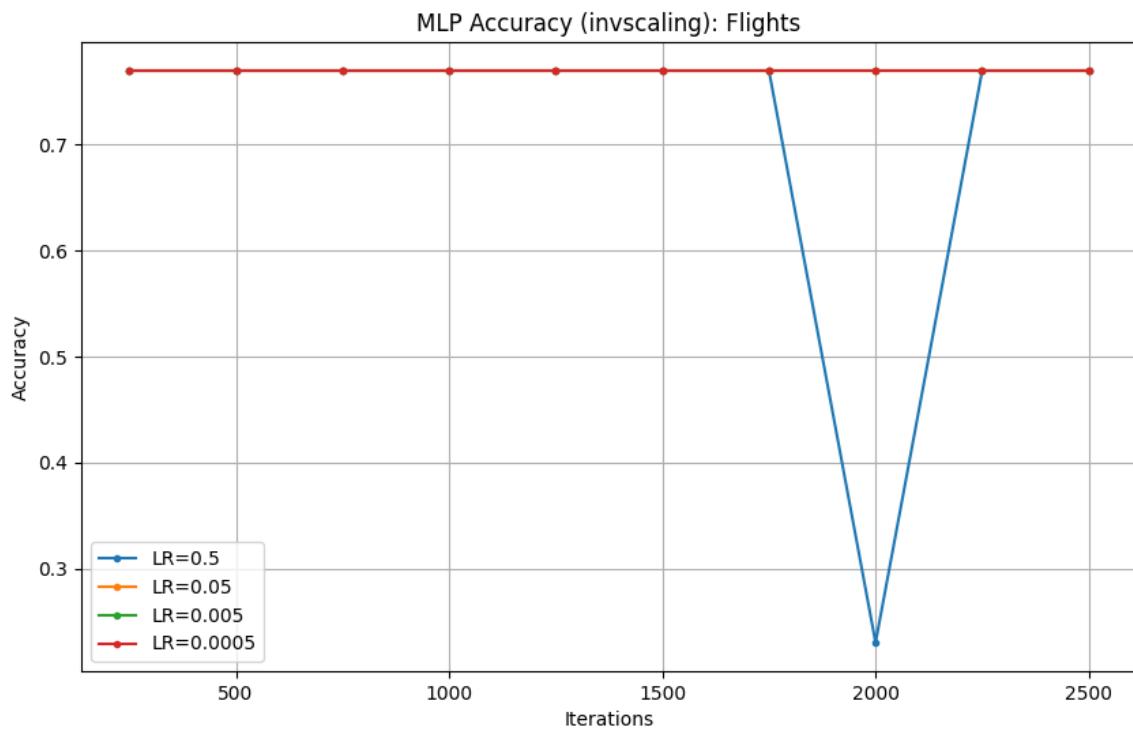
Constant Learning Rate - Precision



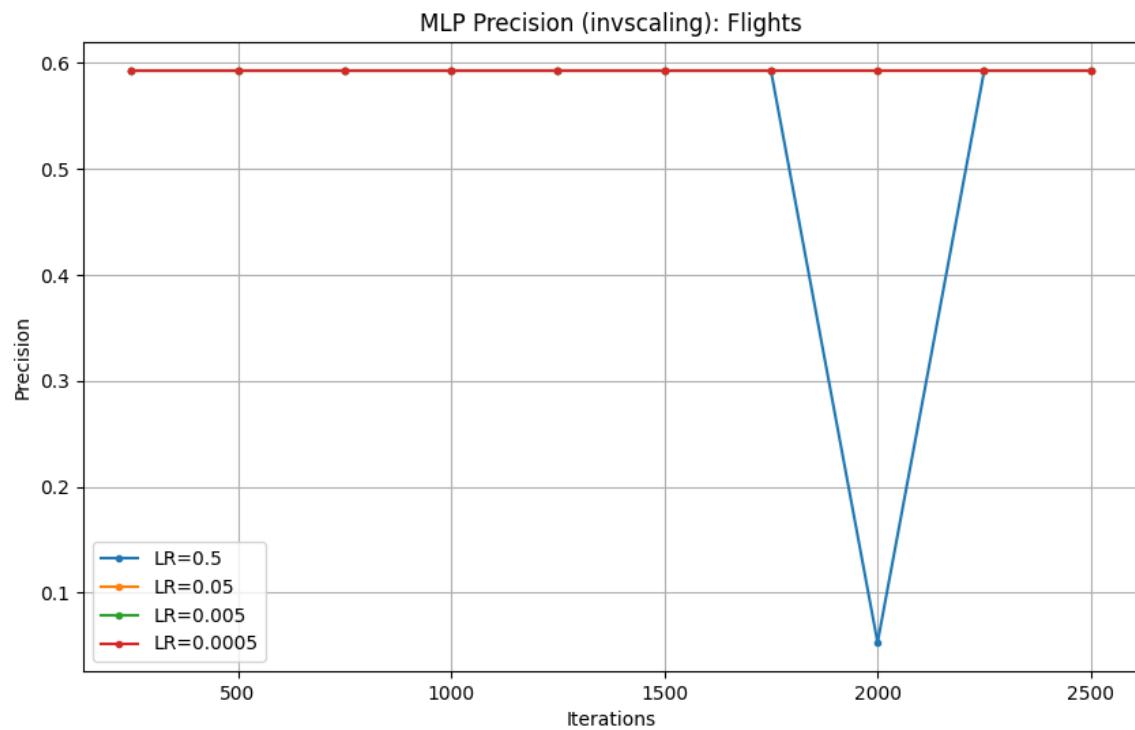
Constant Learning Rate - Recall



Inverse Scaling Learning Rate - Accuracy



Inverse Scaling Learning Rate - Precision



Inverse Scaling Learning Rate - Recall

