

Data Science Project

Team nr: 06

Student 1:	Maria João Pupo Correia	IST nr:	86476
Student 2:	Ricardo Andrade Silva	IST nr:	100071
Student 3:	Leonardo Pereira	IST nr:	103215
Student 4:	Afonso Carvalho	IST nr:	116482

LAB 01

1 Dataset 1 - Traffic Accidents

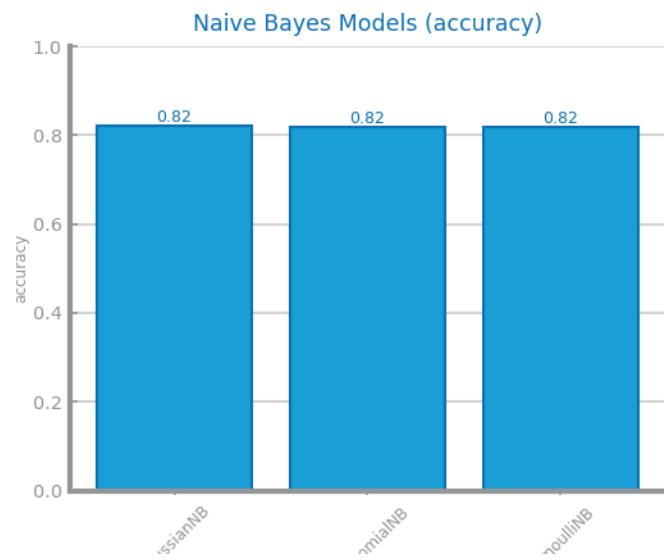


Figure 1: Study of Naive-Bayes alternatives comparing accuracy.

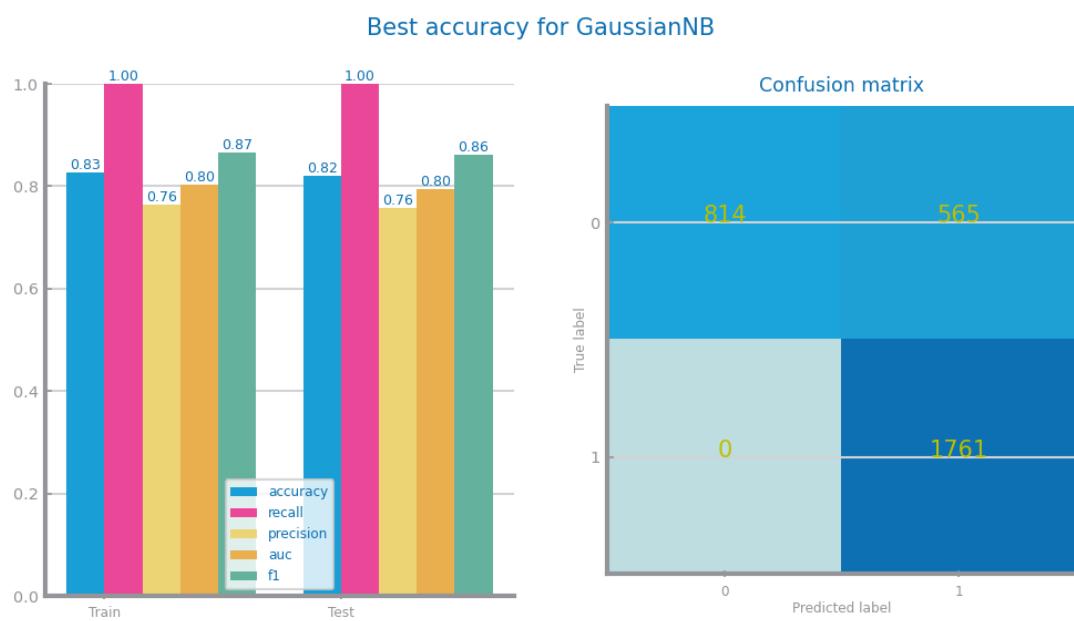


Figure 2: Performance analyses for the Naive-Bayes model with the greatest accuracy.

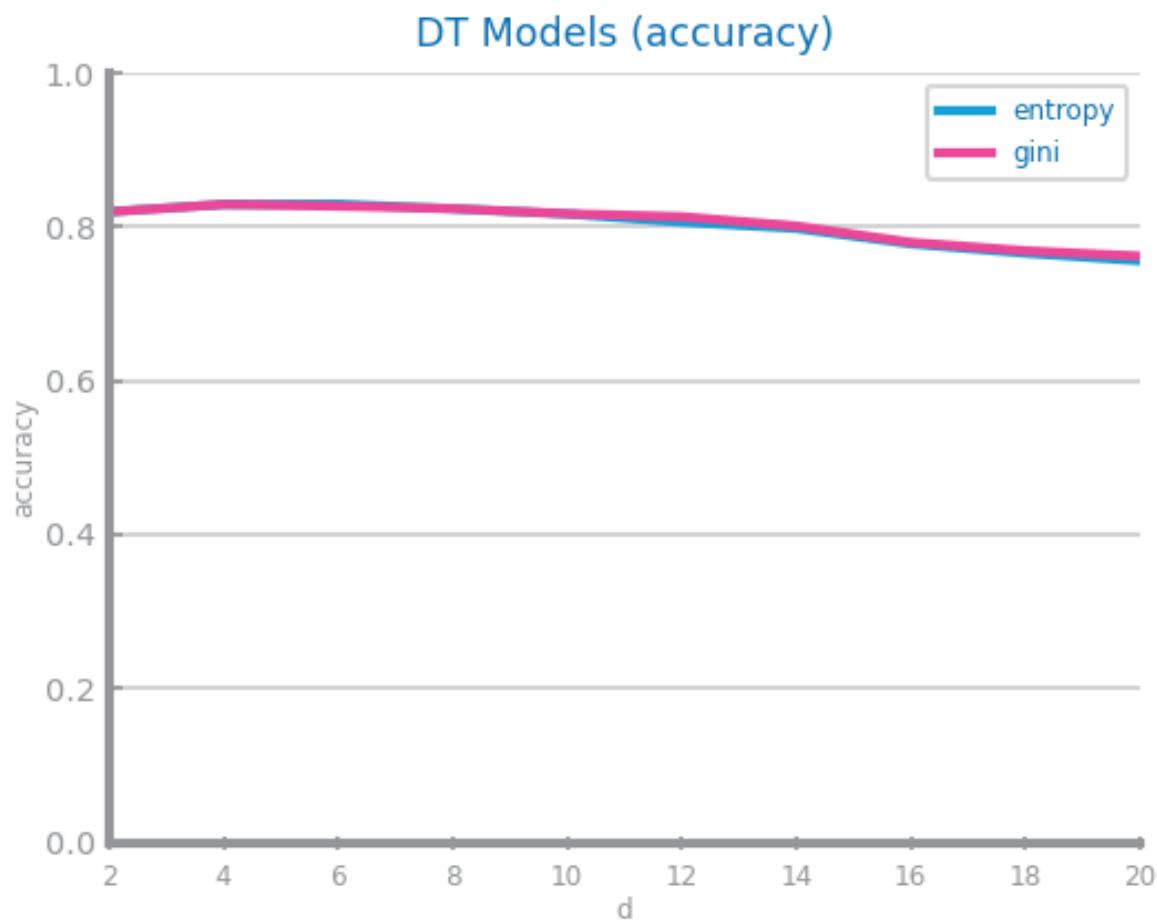


Figure 3: Study of Decision Trees alternatives comparing accuracy.

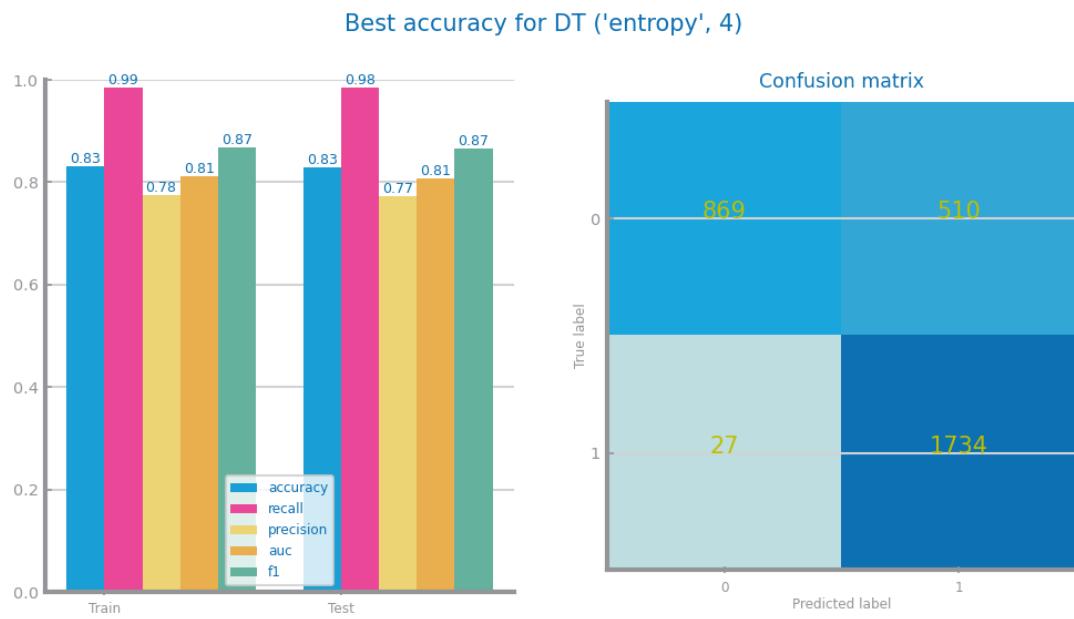


Figure 4: Performance analyses for Decision Trees model with the greatest accuracy.

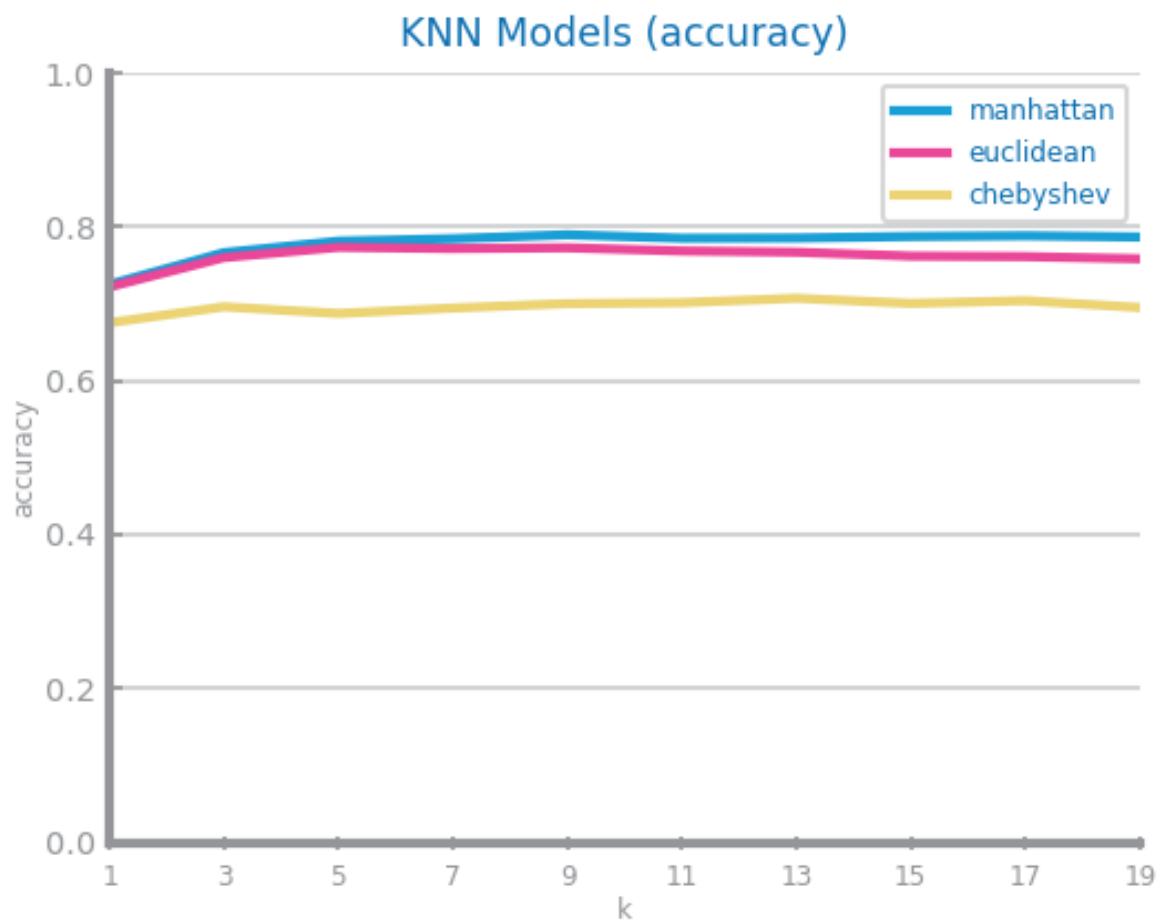


Figure 5: Study of KNN alternatives comparing accuracy.

Best accuracy for KNN (9, 'manhattan')

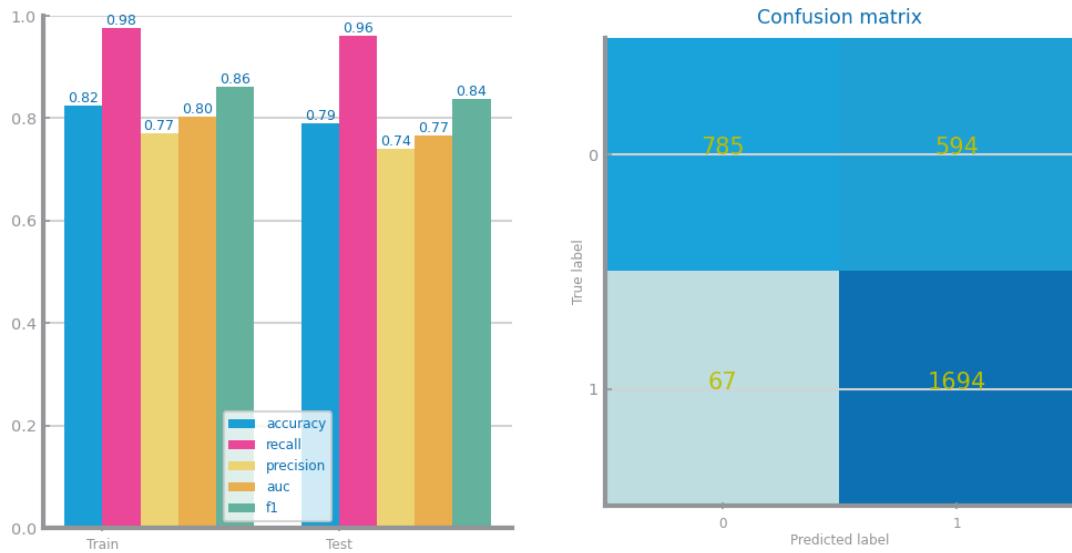


Figure 6: Performance analyses for KNN model with the greatest accuracy.

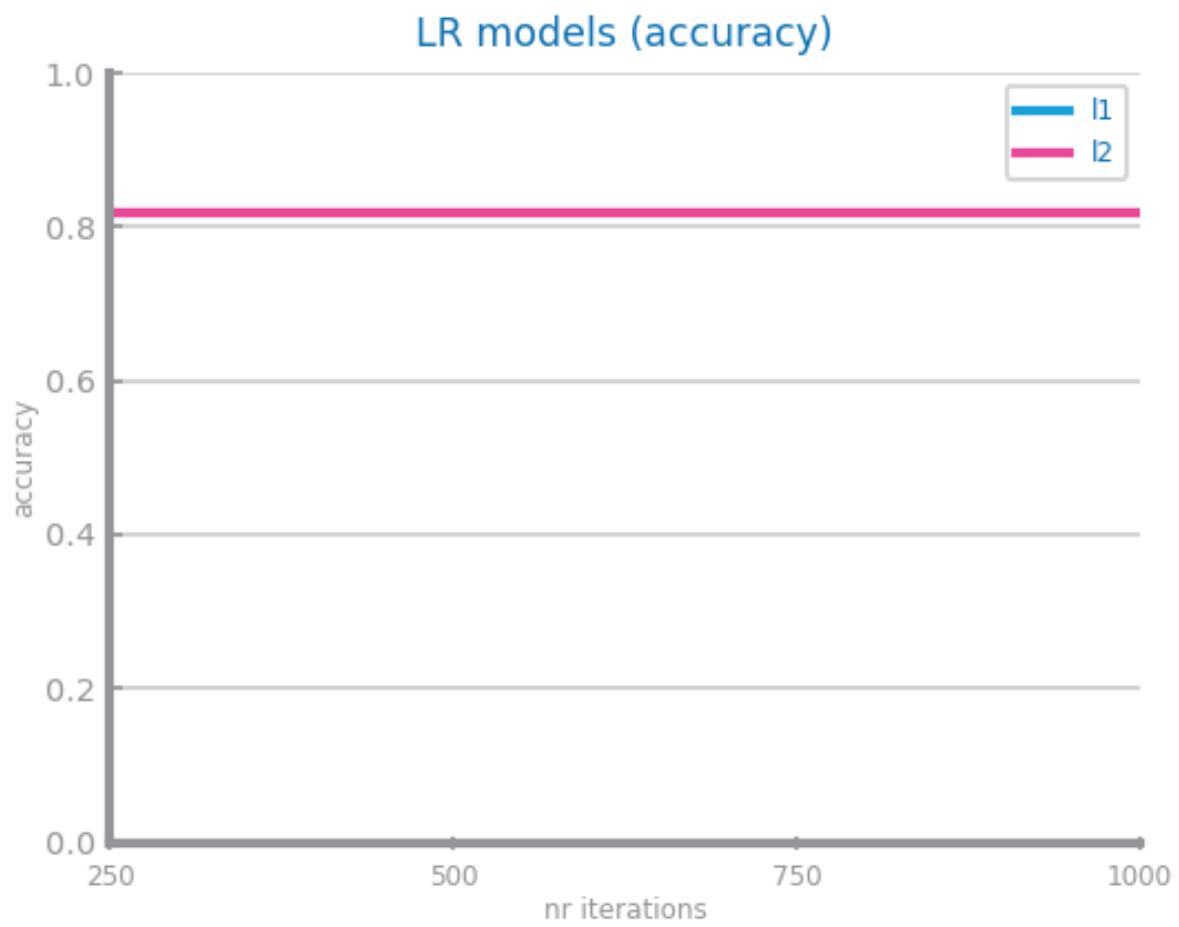


Figure 7: Study of Logistic Regression alternatives comparing accuracy.

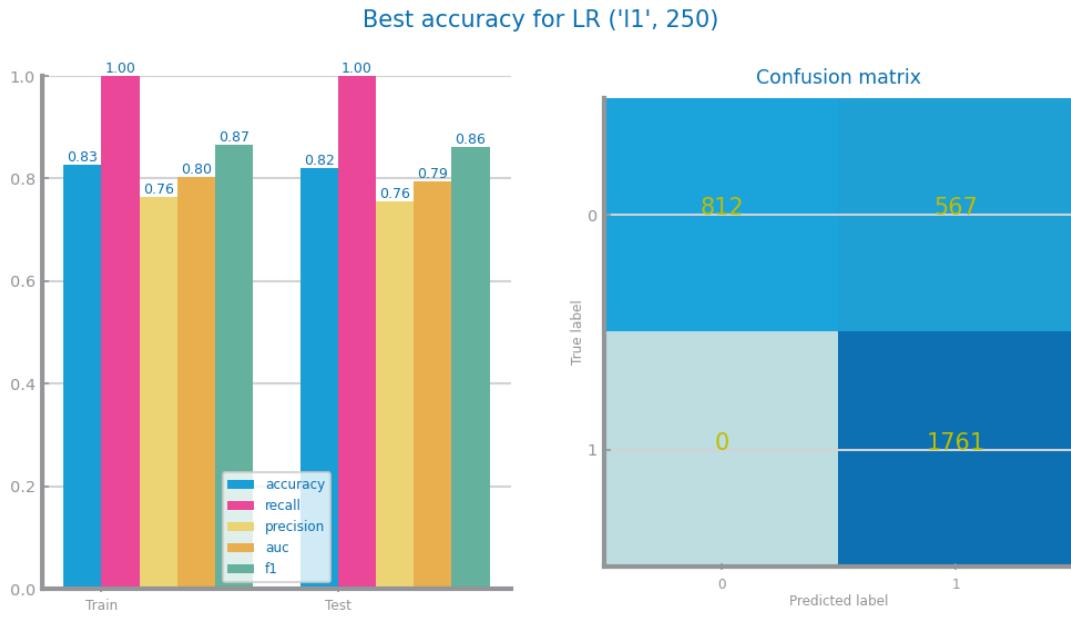


Figure 8: Performance analyses for the Logistic Regression model with the greatest accuracy.

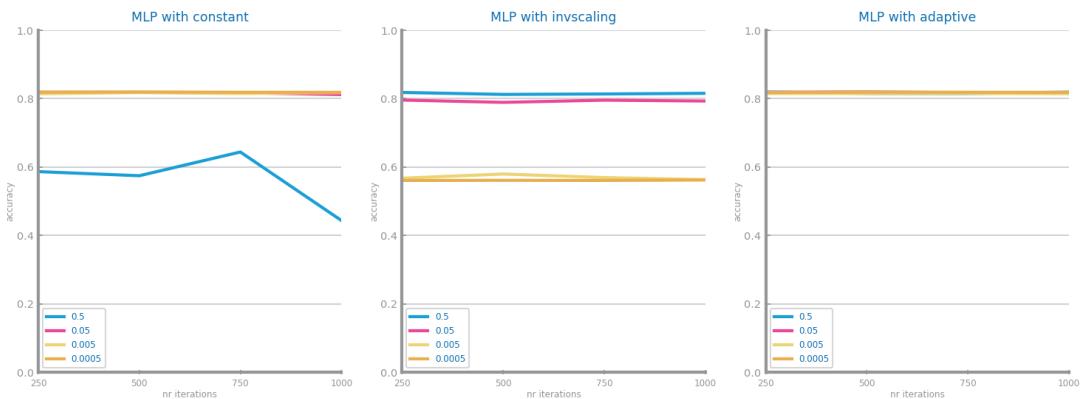


Figure 9: Study of Multi-layered Perceptron alternatives comparing accuracy.

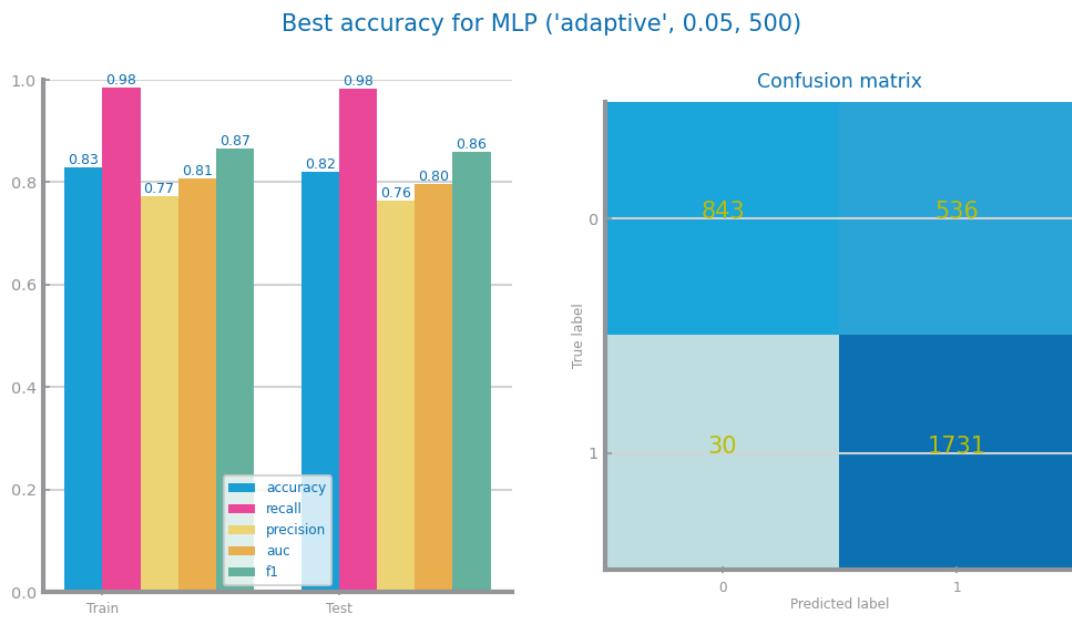


Figure 10: Performance analyses for the Multi-layered Perceptron model with the greatest accuracy.

2 Dataset 2 - Combined Flights

By dropping either the missing values: either the variables or the rows, it is not possible to train models because there are no positive examples. All the canceled flights were dropped since at least one of its variables was empty.