1- Summary:

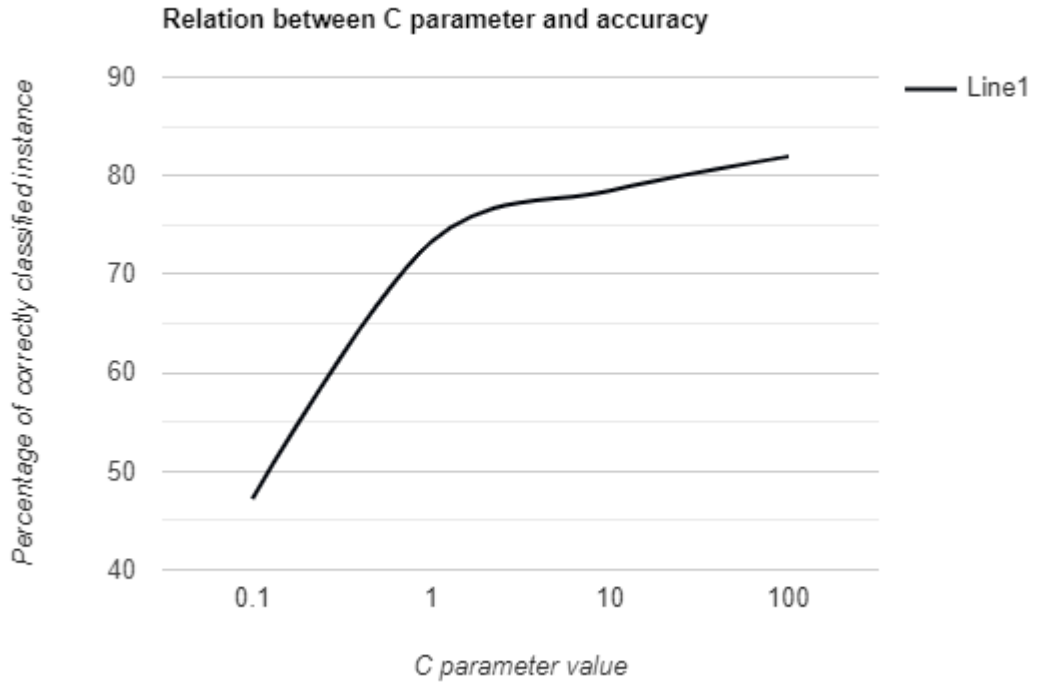
Correctly Classified Instances	211 (73.2639 %)
Kappa statistic	0.6461
Mean absolute error	0.2812
Root mean squared error	0.3572
Relative absolute error	74.9451 %
Root relative squared error	82.3928 %
Total number of instances	288

Detailed Accuracy by Class:

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0,758	0,208	0,500	0,758	0,603	0,482	0,776	0,431	opel
	0,346	0,038	0,771	0,346	0,478	0,419	0,788	0,539	saab
	0,870	0,028	0,918	0,870	0,893	0,856	0,941	0,856	bus
	0,986	0,074	0,814	0,986	0,892	0,859	0,962	0,811	van
Weighted Avg.	0,733	0,081	0,763	0,733	0,718	0,658	0,869	0,668	

2- C is complexity parameter which SMO support vector machine uses to build a hyperplane between any two target classes.
Typical values of C parameter is exponents of 10.

C parameter value	Percentage of correctly classified instance
0.1	47.2222
1	73.2639
10	78.4722
100	81.9444



When C parameter is increased, accuracy is also increased since C parameter effects the margin of hyperplane. Larger margin means lower generalization error, which resulted in better accuracy.

3- Maximum margin hyperplane is the hyperplane which have maximized sum of shortest distance of positive examples and negative examples. Hyperplane is separator of data points.
The support vectors are those points for which the Lagrange multiplier is not zero.

4- Kernel functions takes data to transform into the required form. Examples are linear, nonlinear, polynomial, radial basis function (RBF), and sigmoid.
They are useful to make operations in high-dimensional spaces without computing the coordinates of the data in that space, but rather by simply computing the inner products. This resulted in lower complexity and lower cost.