CON 101 - Assignment 3

(Classification of articles into Newsgroups Categories)

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Entry No: 2014CS50277

Q1 5-fold cross validation:

The accuracy for set 1 is 95.43568 %.

The accuracy for set 2 is 94.88243 %.

The accuracy for set 3 is 95.50484 %.

The accuracy for set 4 is 95.0899 %.

The accuracy for set 5 is 94.88243 %.

The average accuracy is <u>95.2420440673828 %</u>.

Q2 The accuracy obtained by randomly guessing one of the newsgroups as the target class for each of the articles:

$$A1 = (1/8)^{1446} \approx 0 \%$$

So, the accuracy is improved from 0 to 95.24 % and hence, infinite improvement!