Regularisation and Support Vector Machines - Experiments
Generalisation Theory

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Outline

Introduction

- From generalisation theory, a SVM with larger margin (lower complexity) is considered to generalize better.
- Experiments were performed on a two dimensional dataset in order to check generalization ability of different SVM trained and tested with the same data but different values for the complexity parameter C
- Dataset consisted of 100 points, 15 used for training and 84 for testing
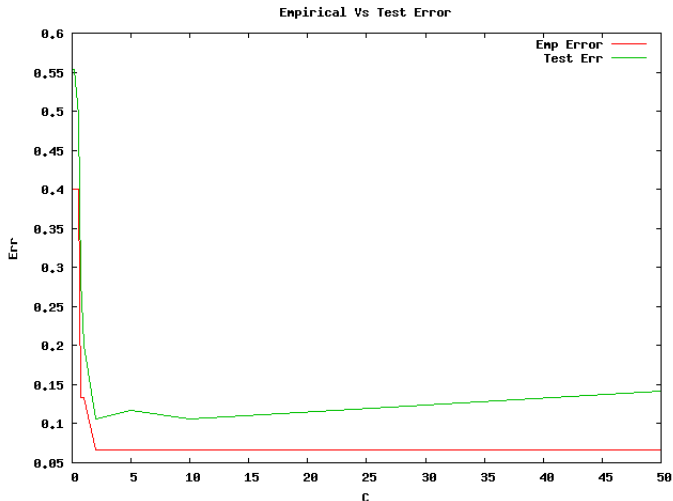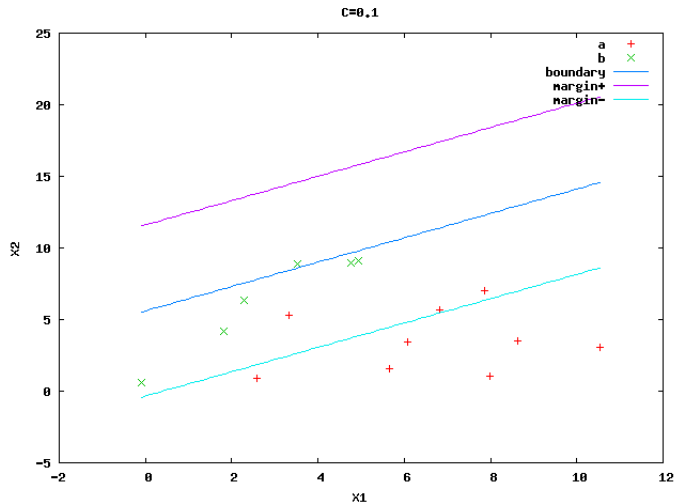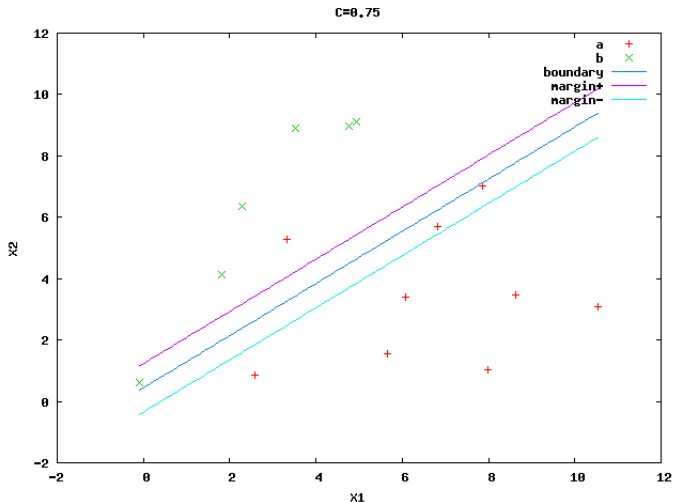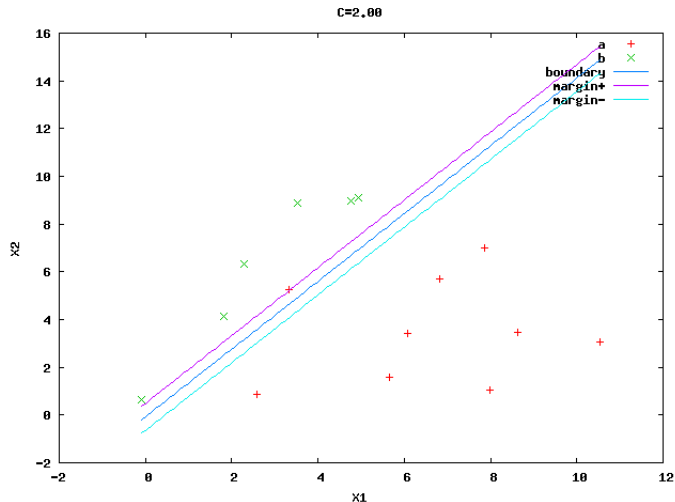
Dataset
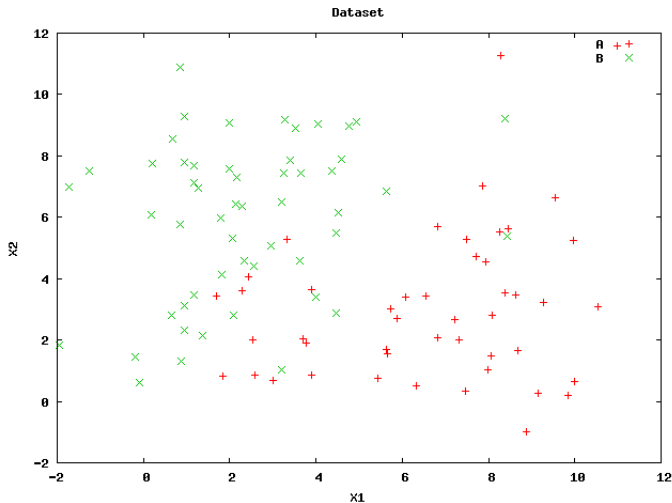
Training Set
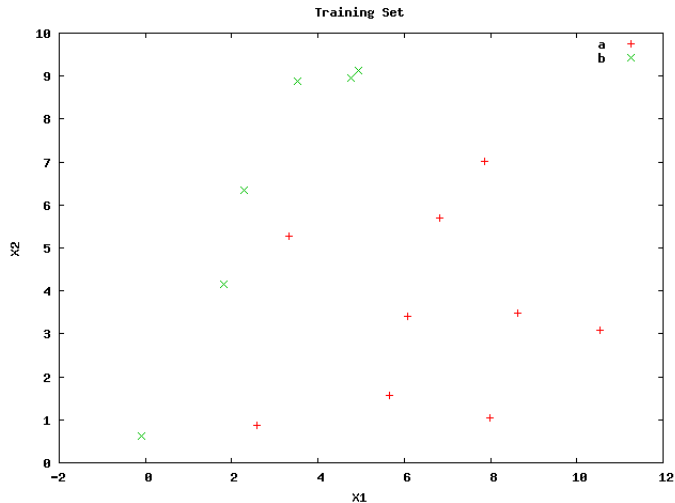
Training Error Vs Testing Error

Classifier obtained for C=0.1

Classifier obtained for C=0.75

Classifier obtained for C=2

Classifier obtained for C=100