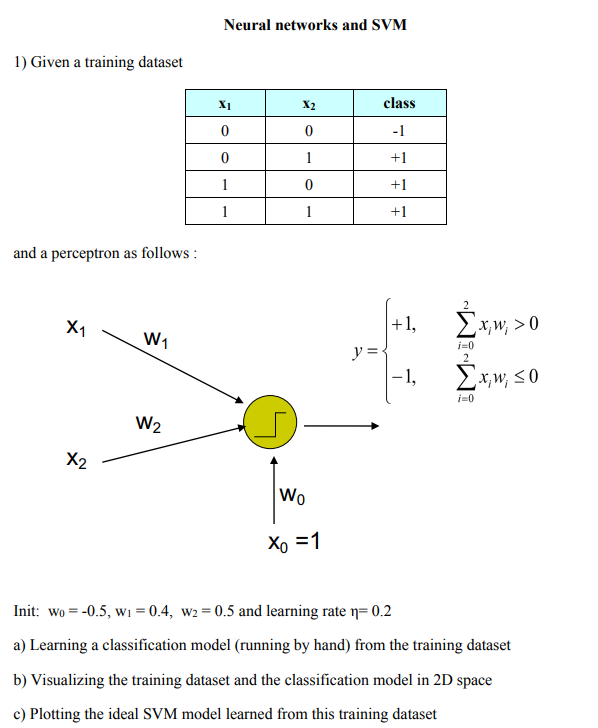
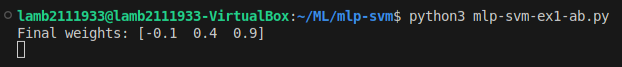
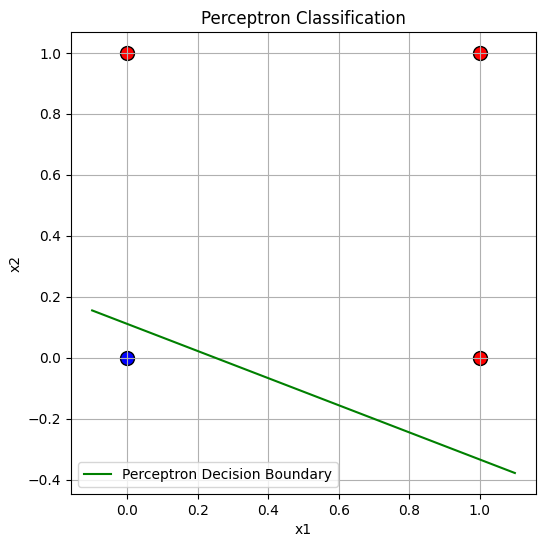
Name: Truong Dang Truc Lam ID: B2111933 Class: CT205H - M04

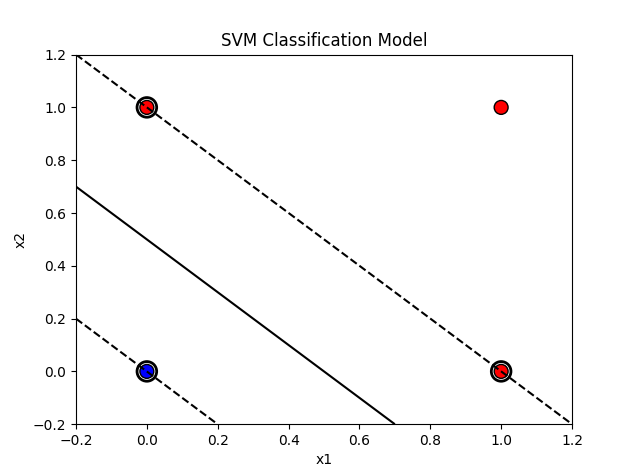
# Neural networks and SVM

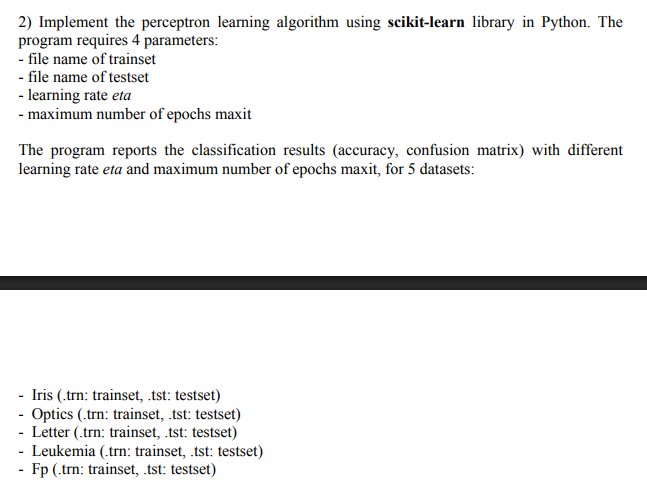


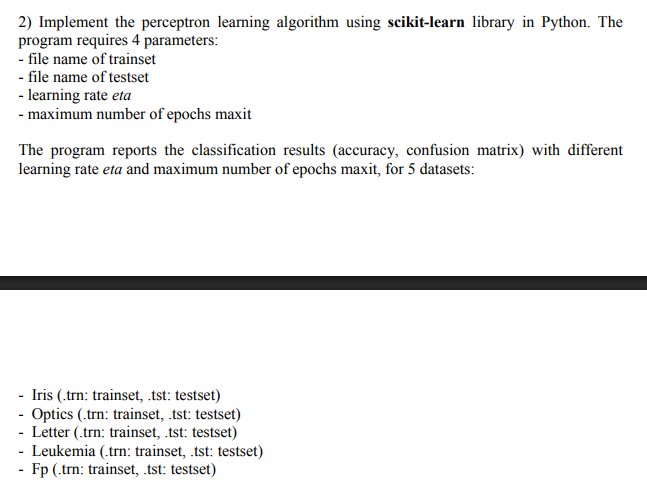






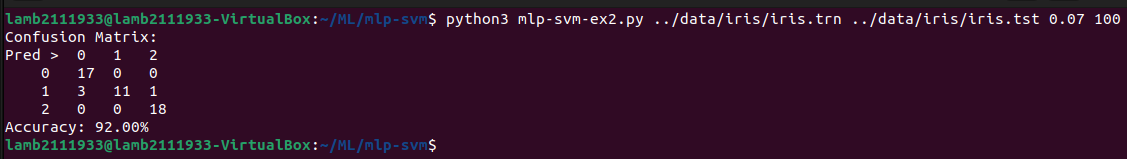




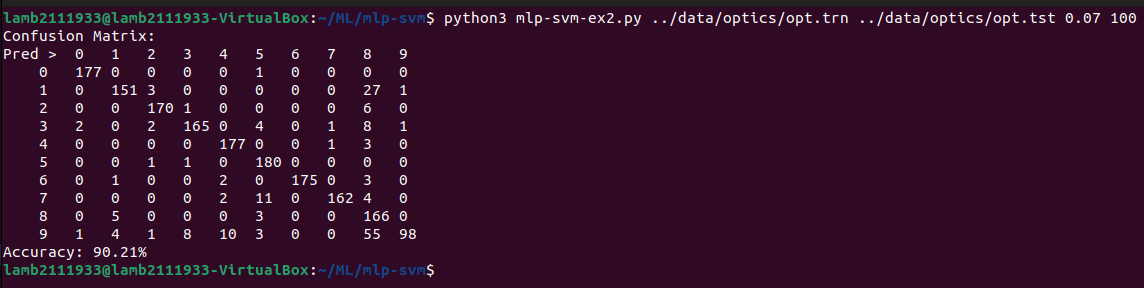


I have tested various learning rates and found that a learning rate (eta) of 0.07 gives the best results. Test cases for 100 epochs:

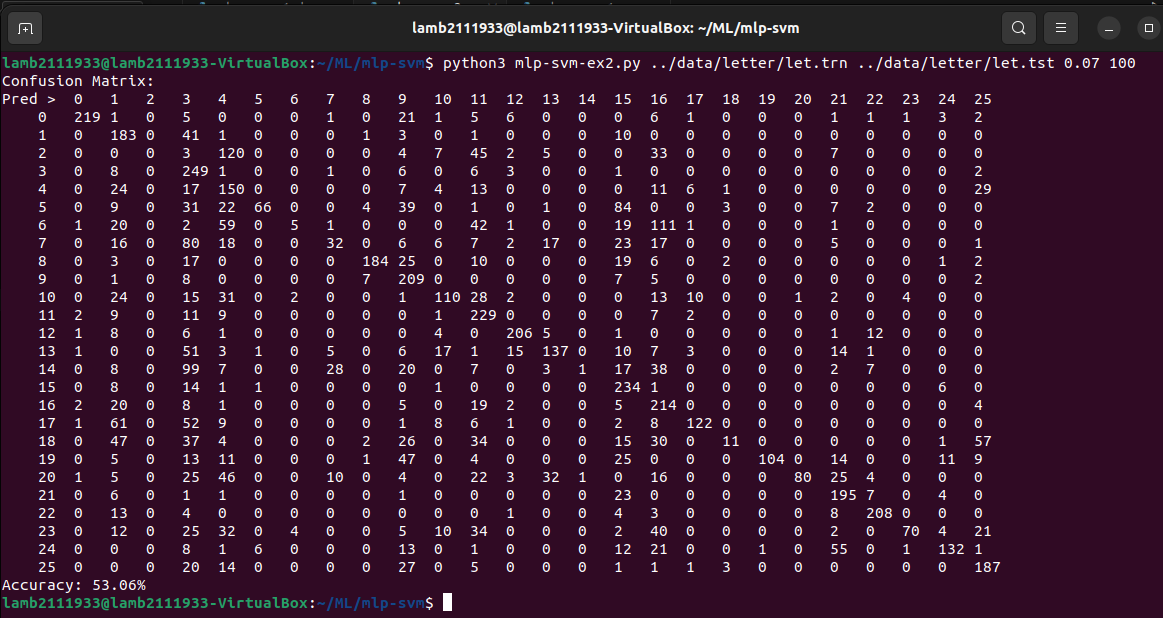
Iris dataset:



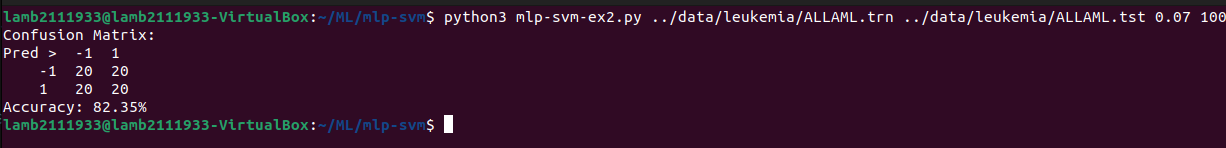
Optics dataset:



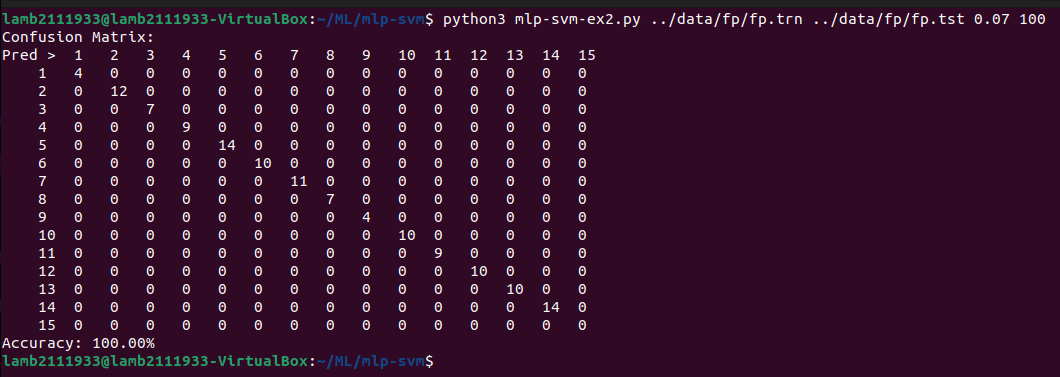
Letter dataset:

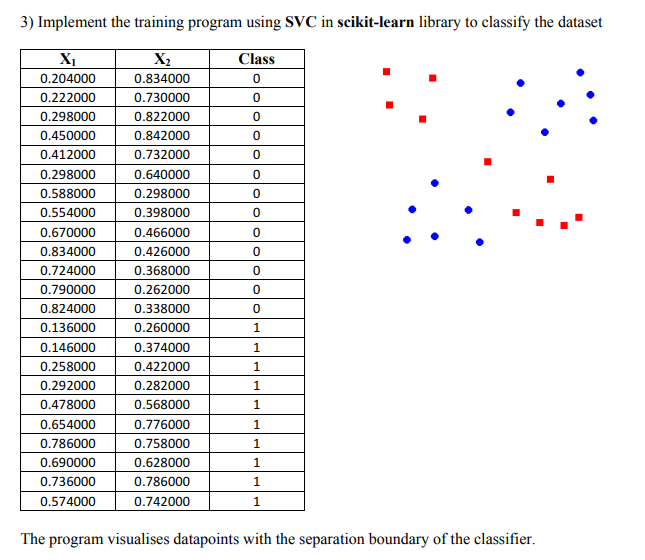


Leukemia dataset:

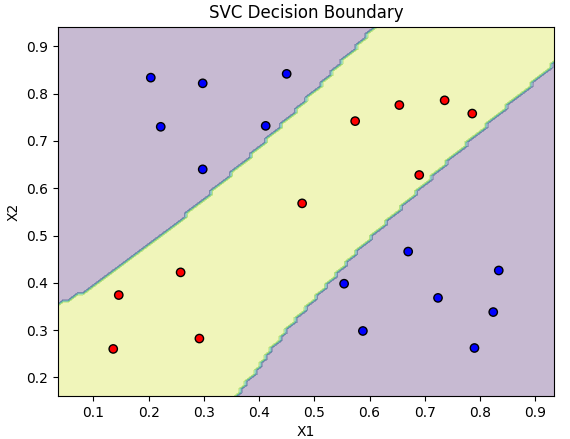


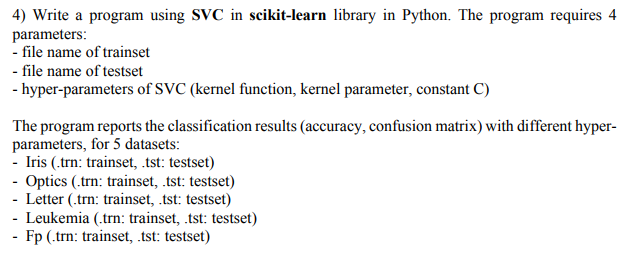
Fp dataset:





I use SVC with polynomial kernel (degree=3) & C=100 for nonlinear classification.

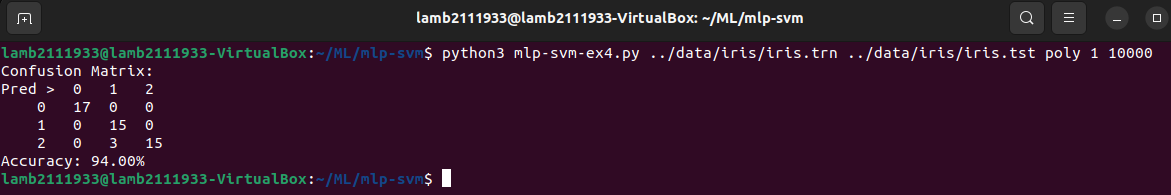




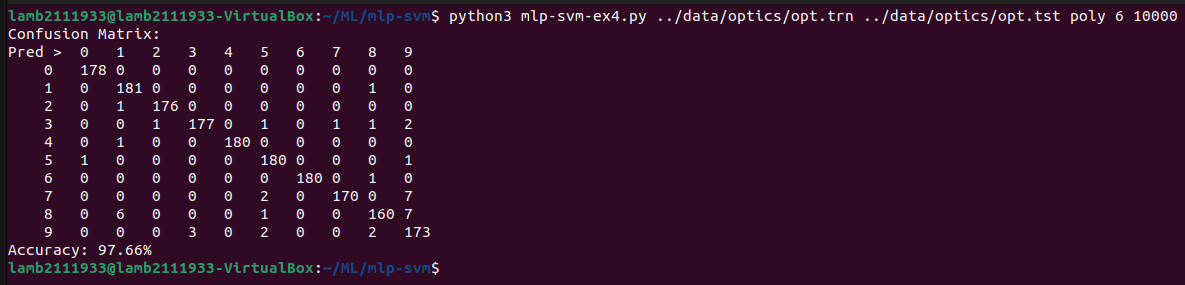
This is the best results after many runs with optimized hyperparameters

(Poly with degree = 1 is equal with Linear)

Iris dataset:



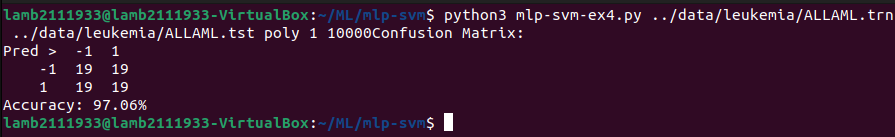
Optics dataset:



Letter datatset:



Leukemia dataset:



Fp dataset:

