

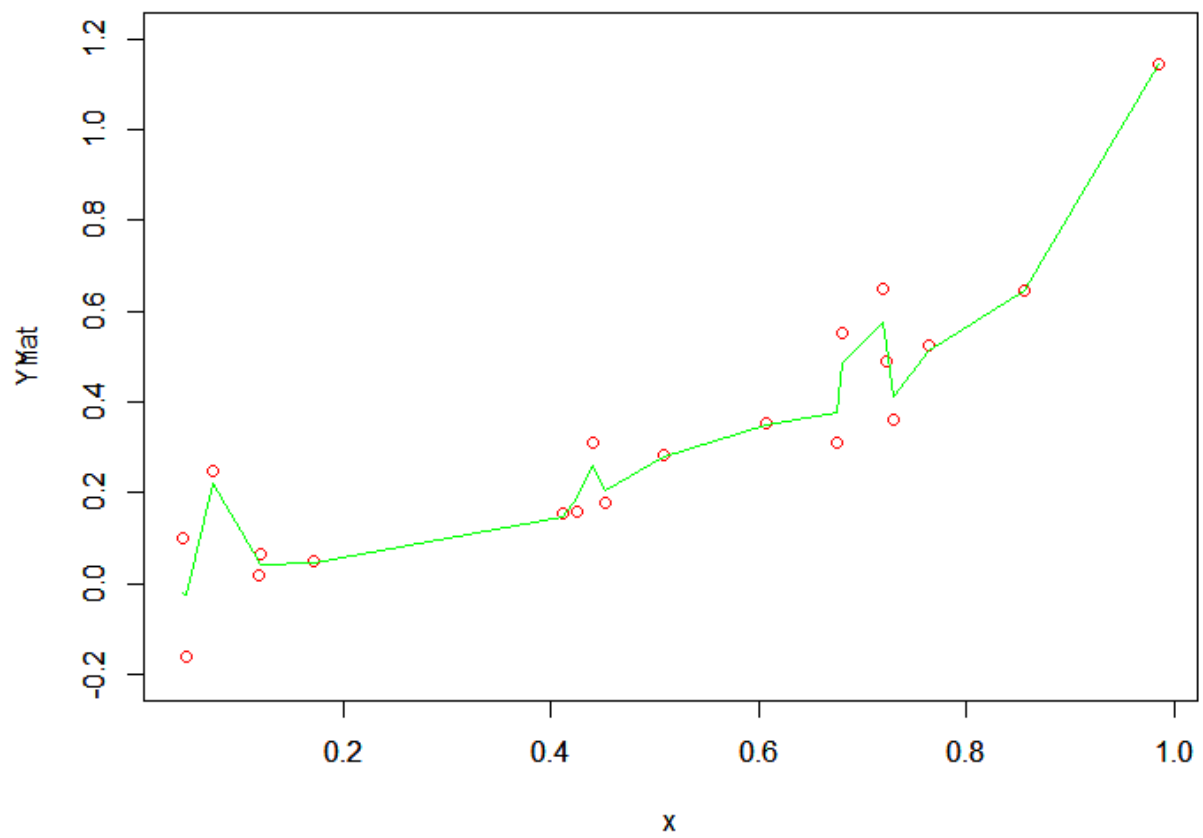
Name: Shraddha Ashok Manchekar

UID: 004945217

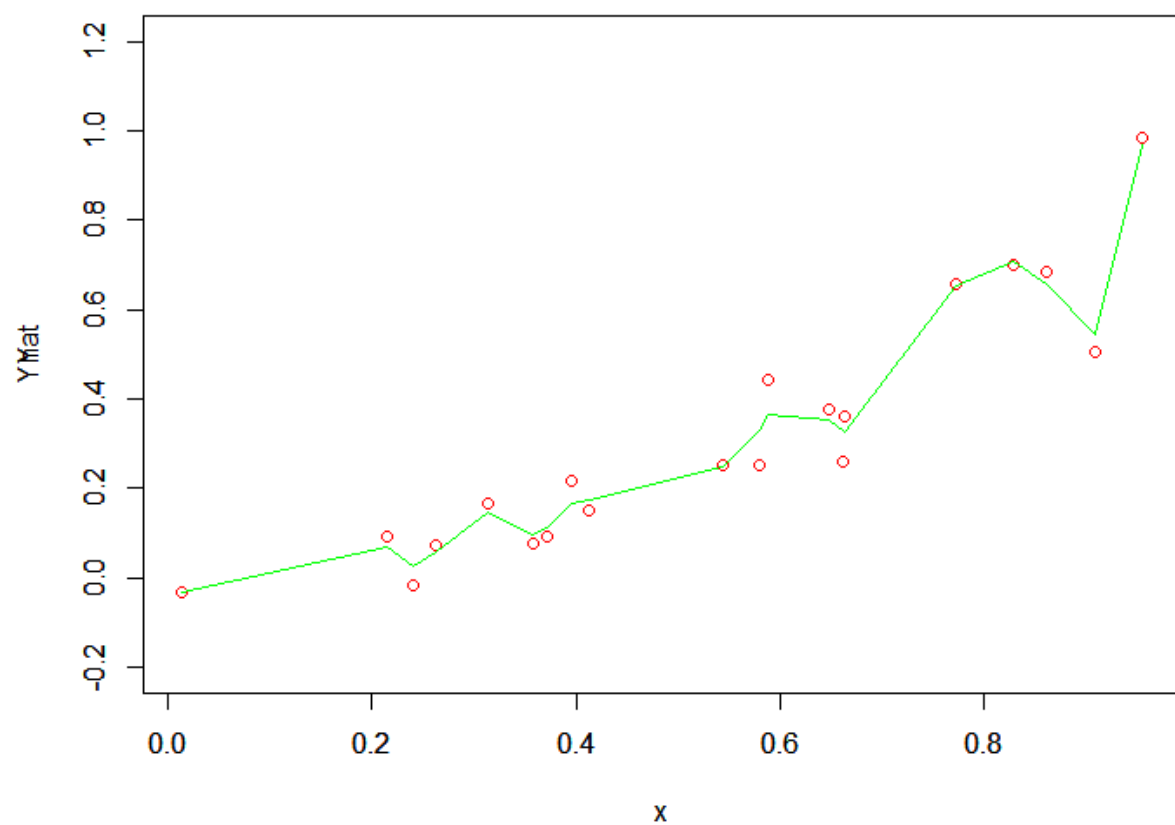
Stats 202A: Assignment 6

Plots of the learned spline curves for different values of lambda:

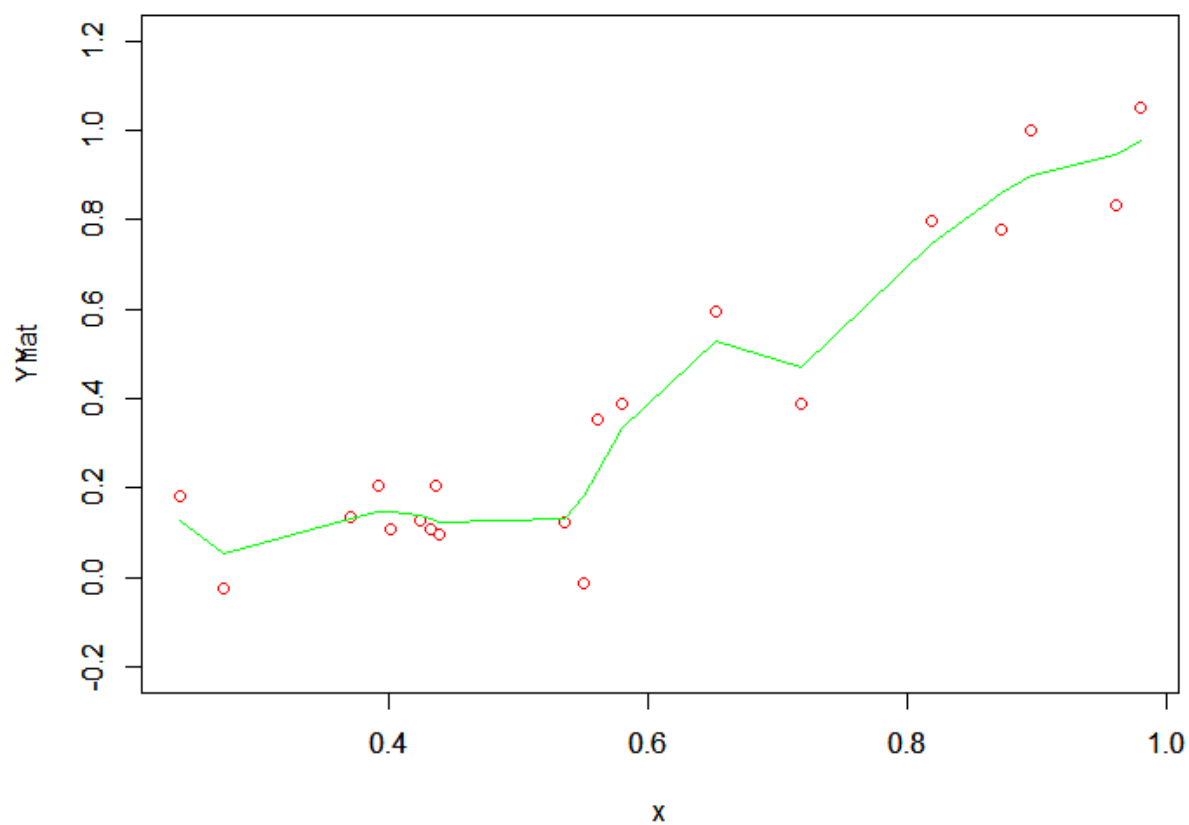
Lambda = 0.0001



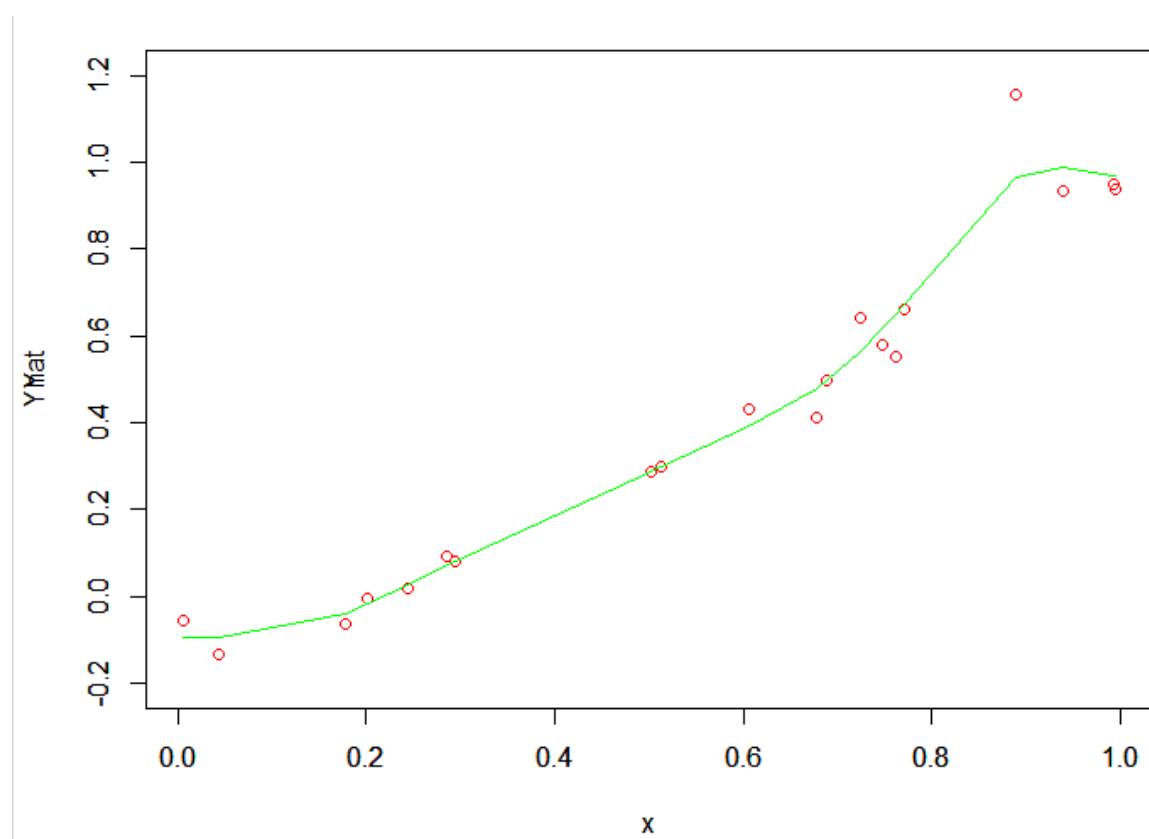
Lambda = 0.001



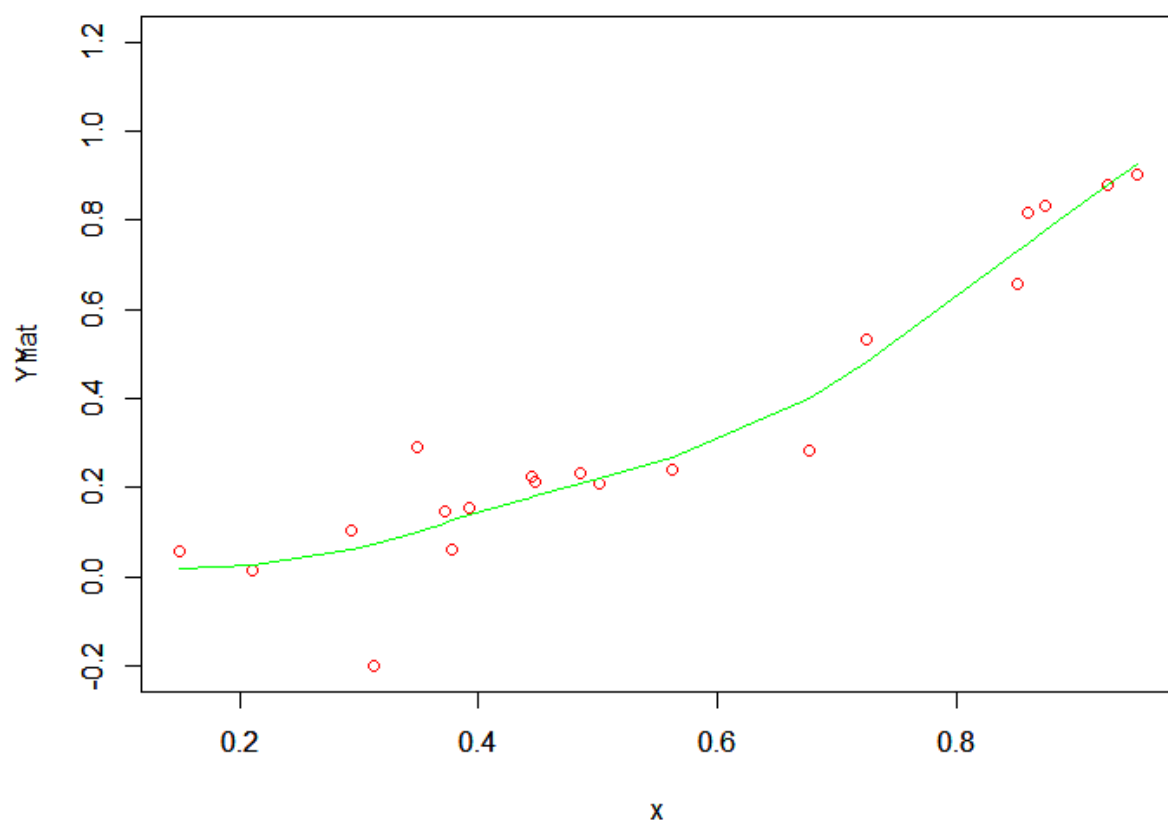
Lambda = 0.01



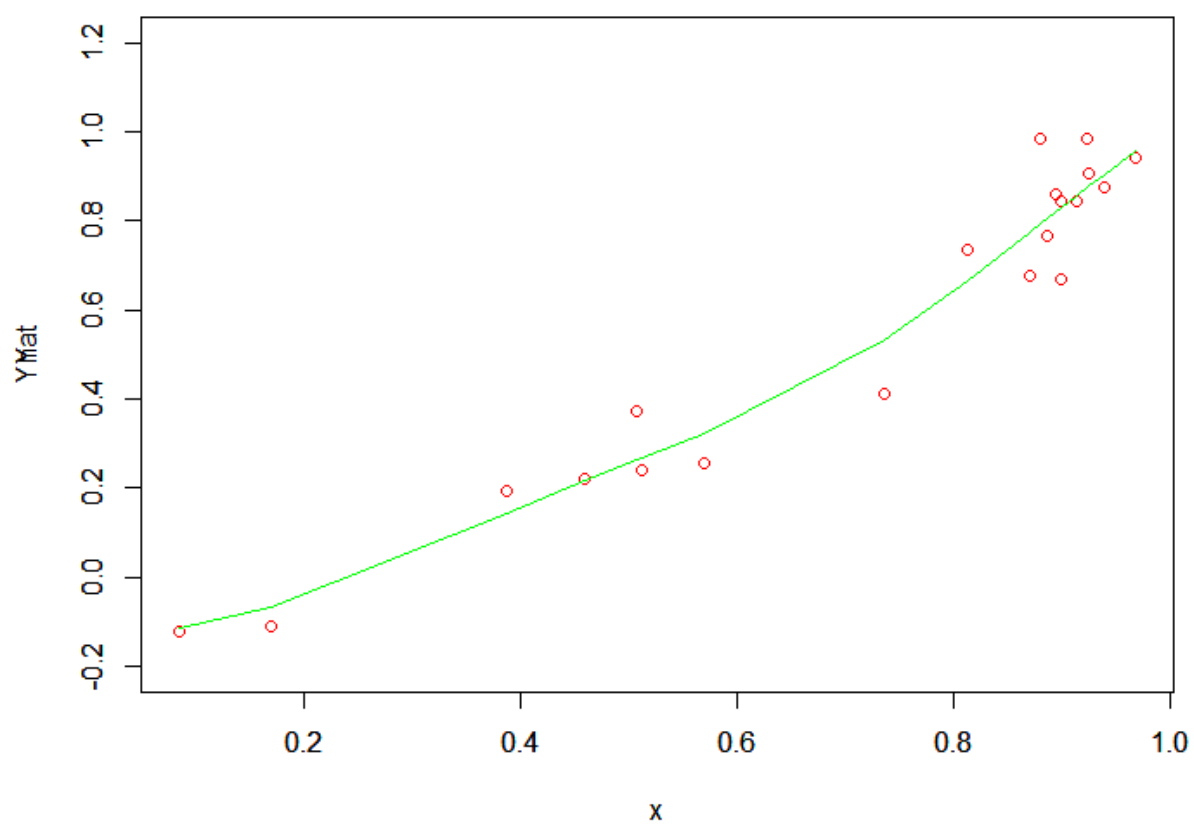
Lambda = 0.1



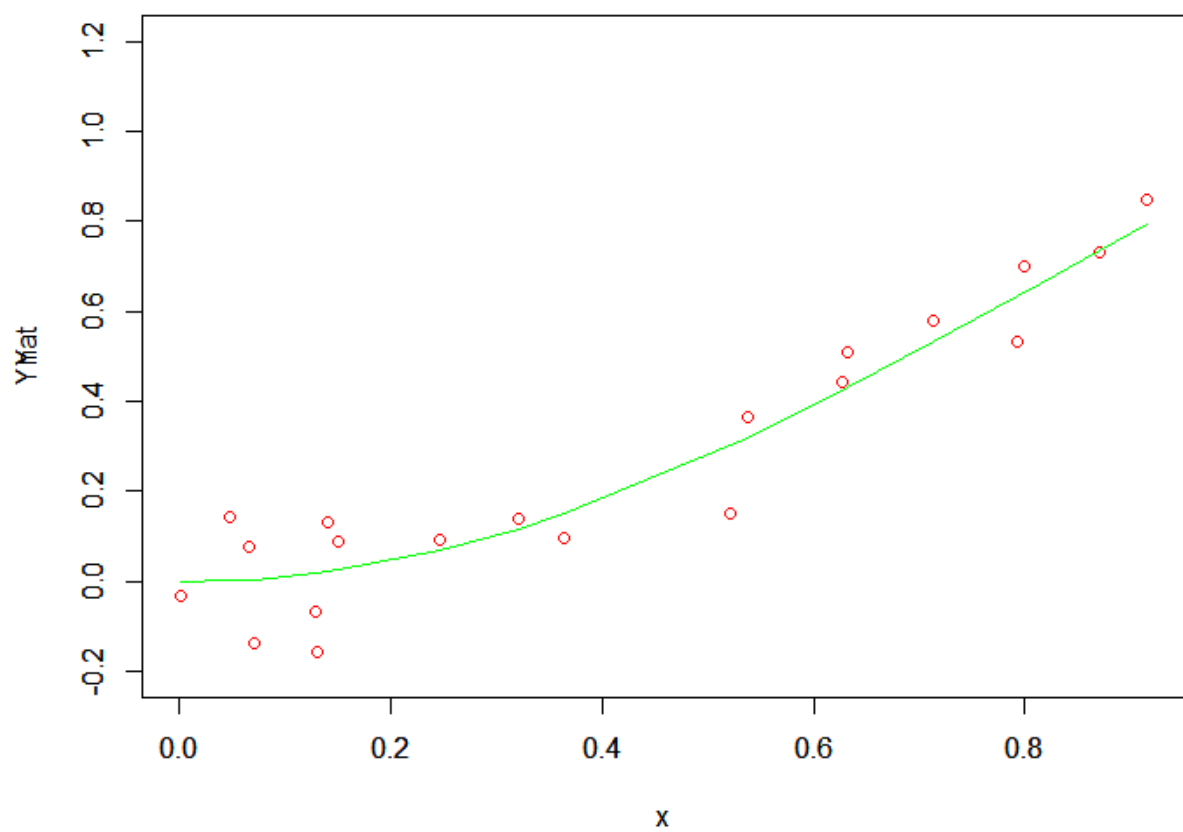
Lambda = 0.5



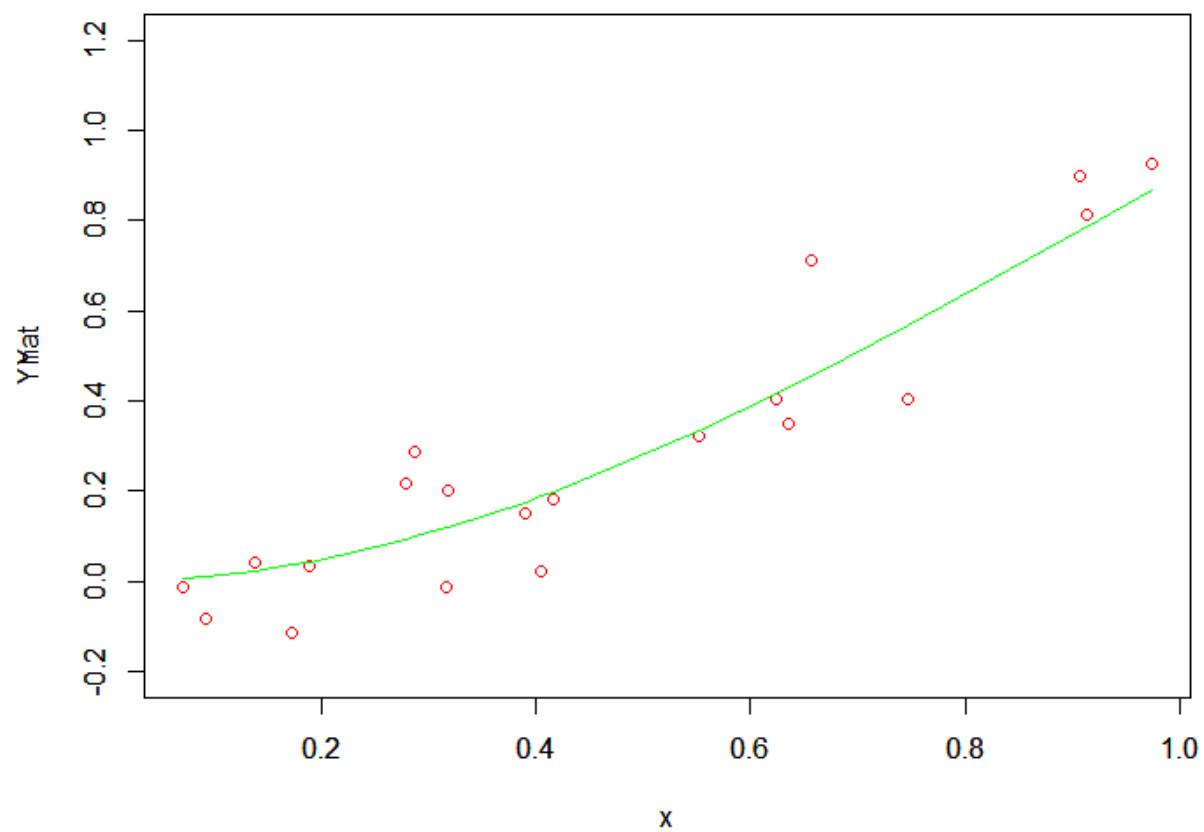
Lambda = 1



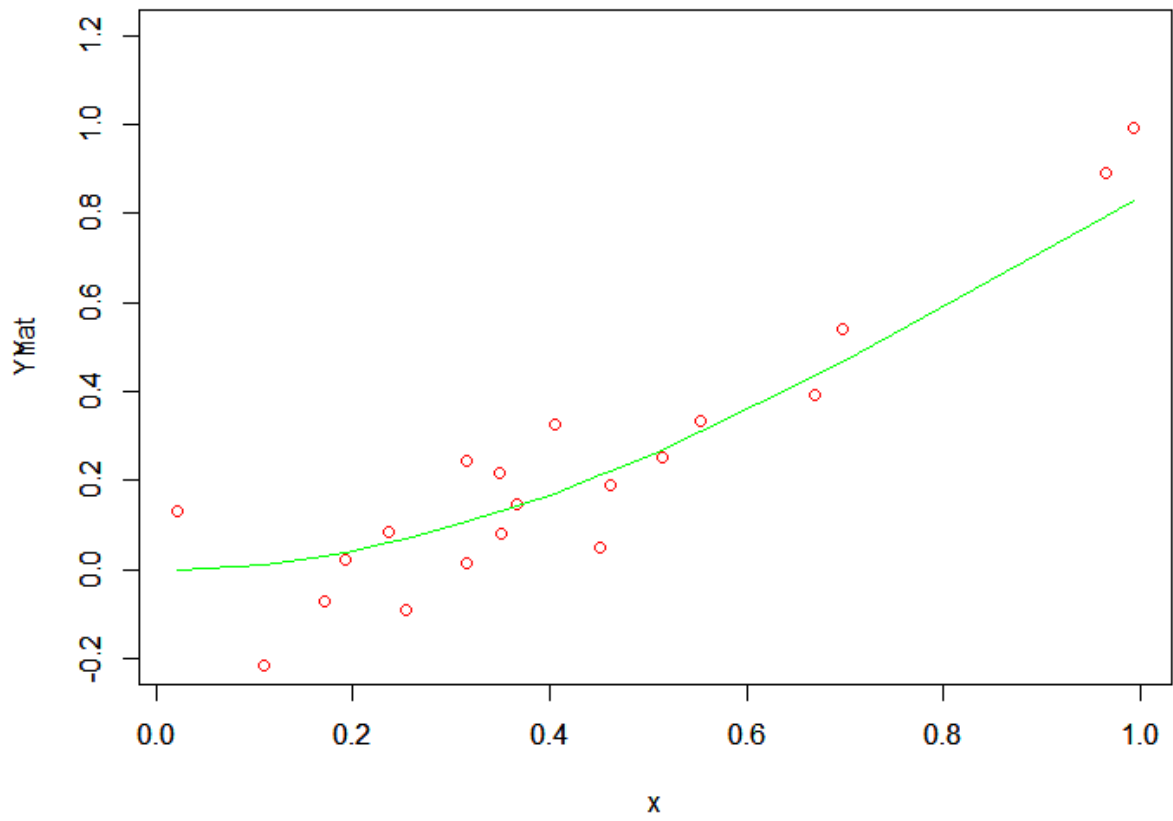
Lambda = 10



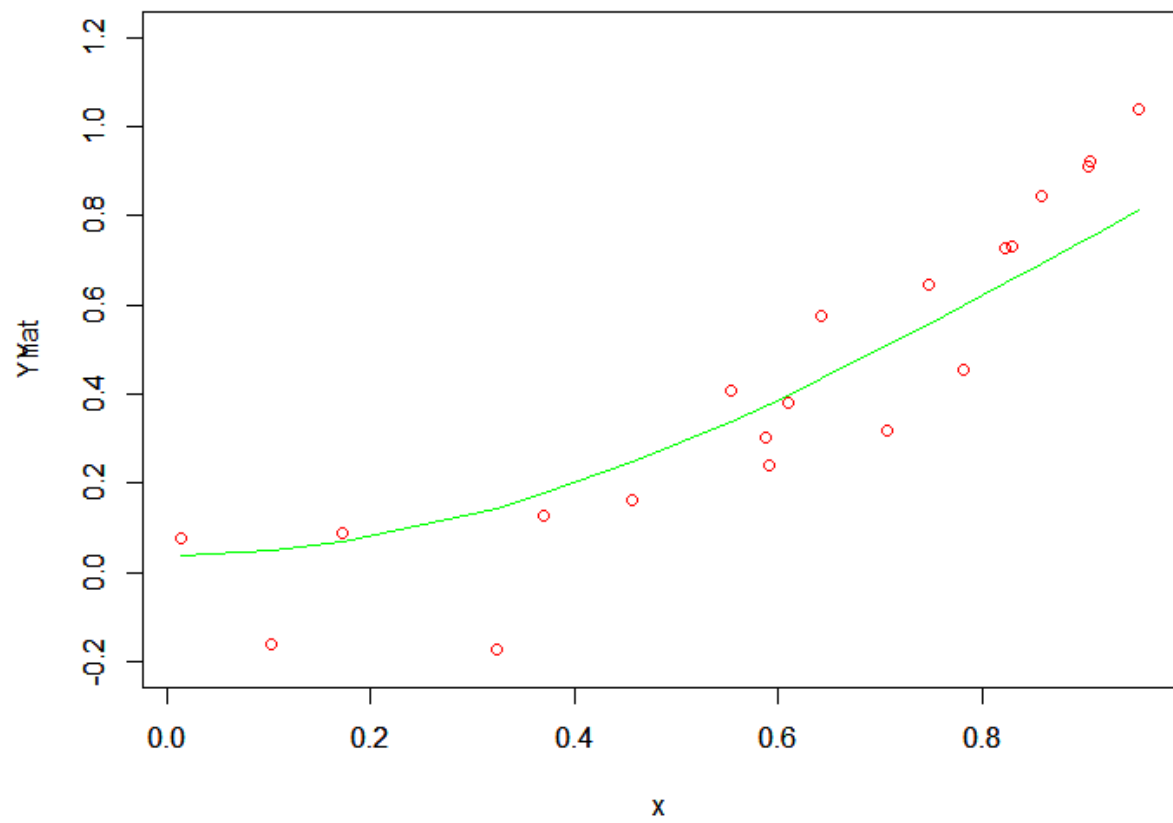
Lambda = 25



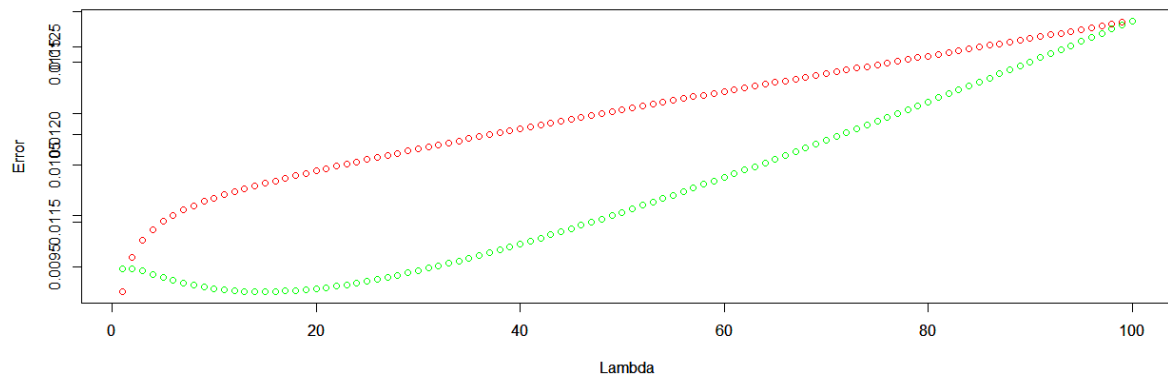
Lambda = 50



Lambda = 100



Training and Testing Plots for Spline Curves:



Green is the Testing Error and Red is the Training Error.

At a lower value of Lambda, the model is overfitting the data. Later the model improves. Towards the very end, it again starts under fitting.