

Exercise 1

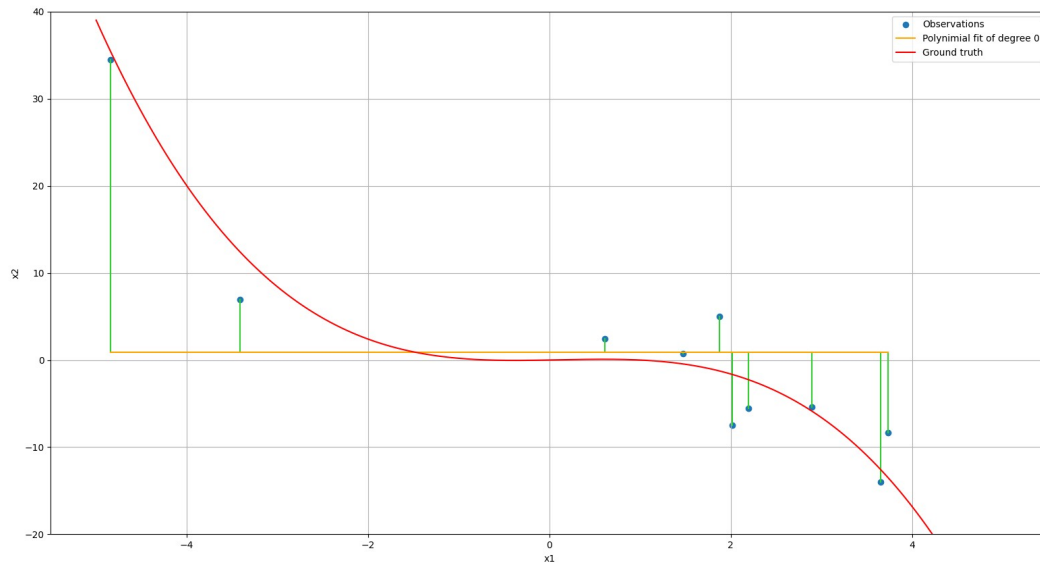


Figure 1: 0 Degree Polynomial

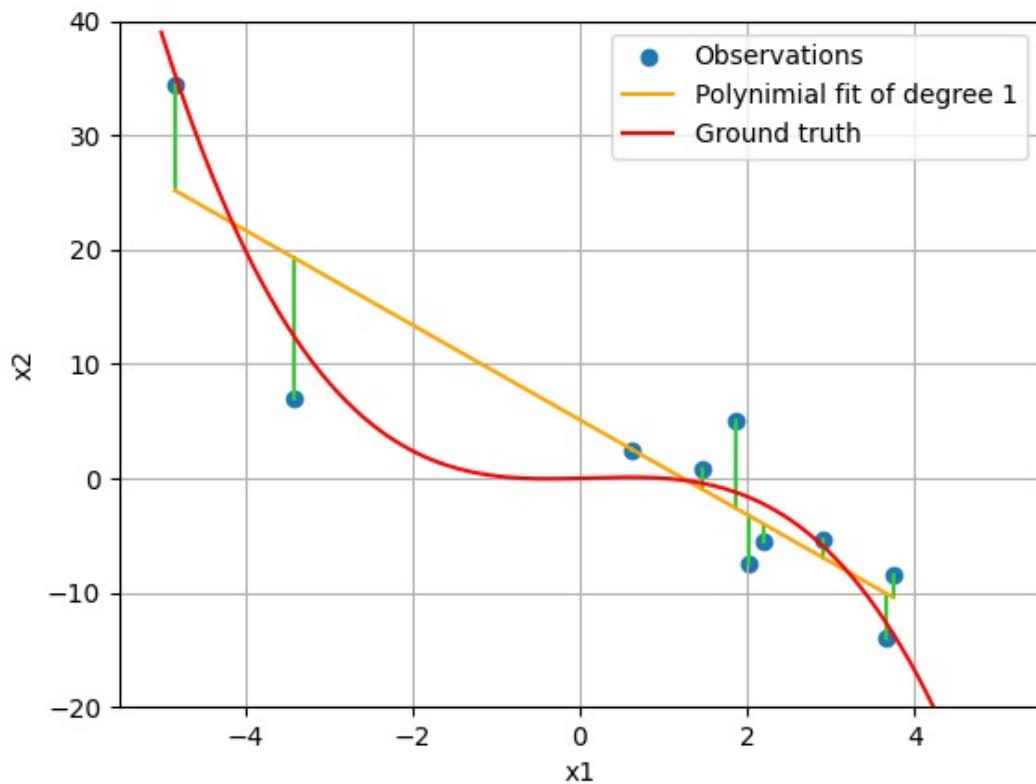


Figure 2: 1 Degree Polynomial

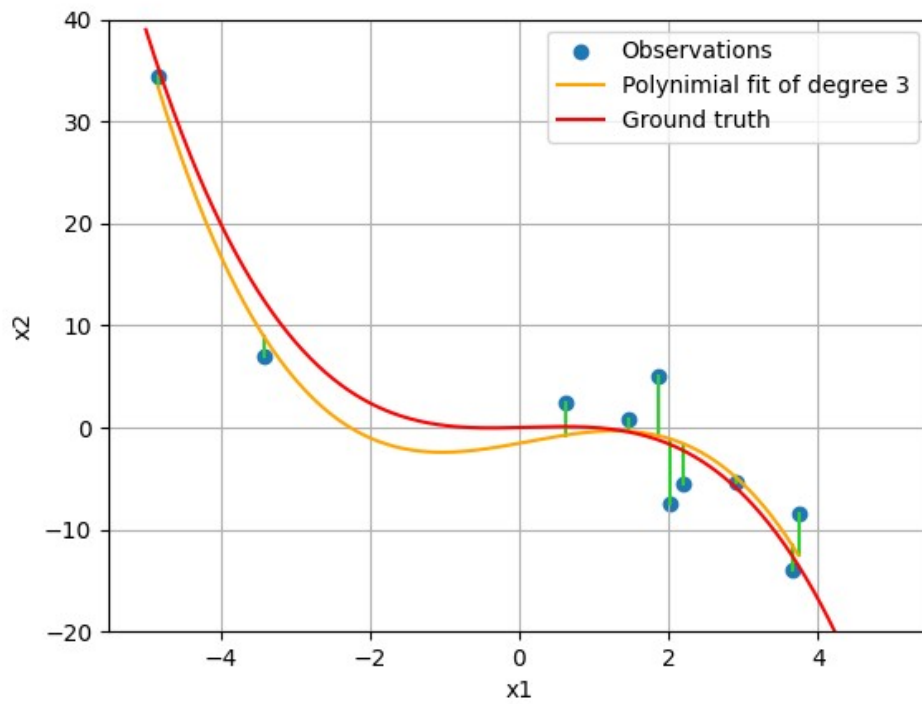


Figure 3: 2 Degree Polynomial

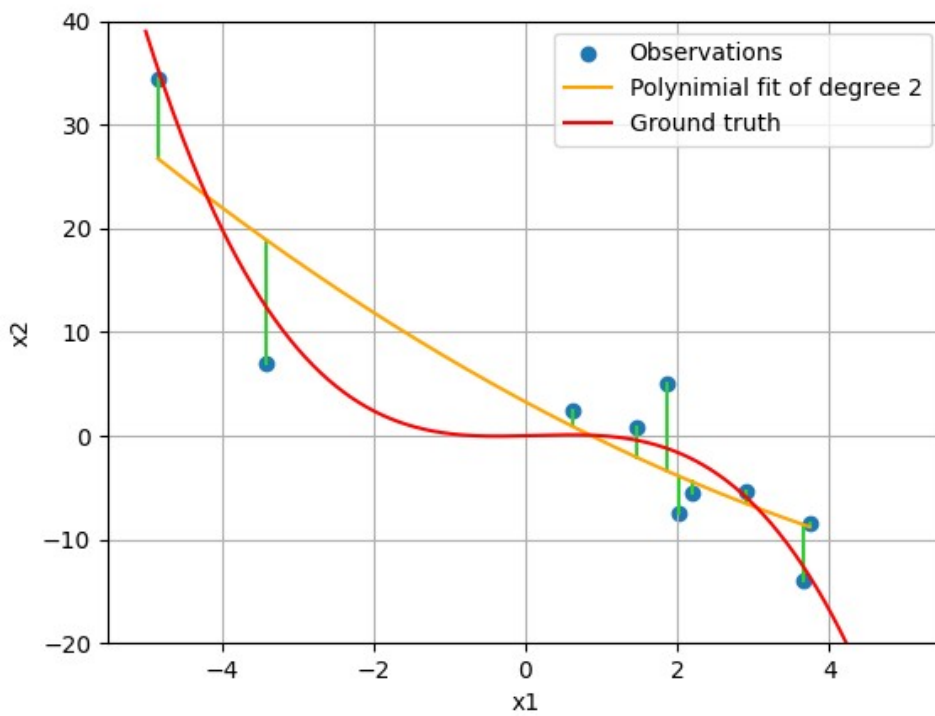


Figure 4: 3 Degree Polynomial

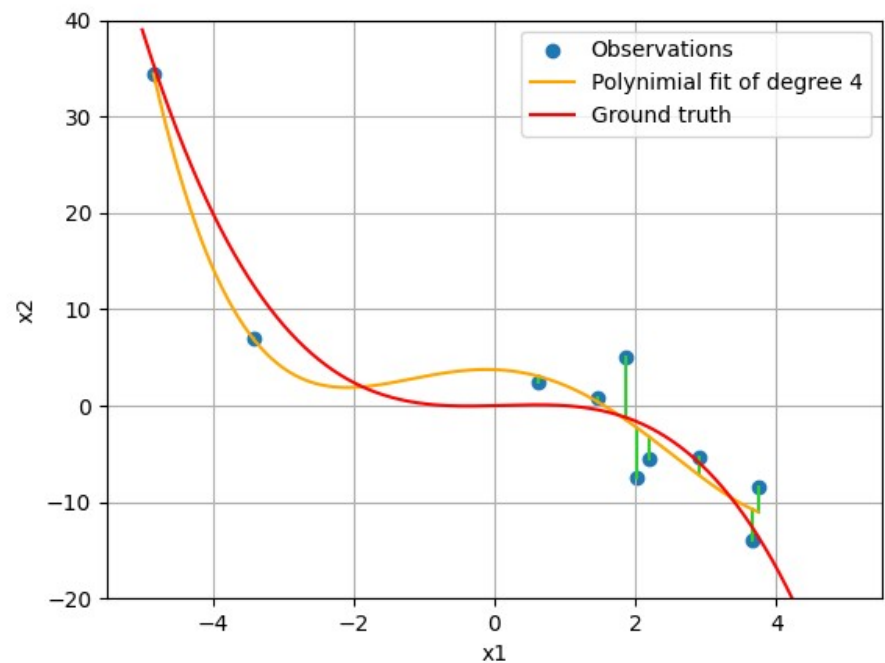


Figure 5: 4 Degree Polynomial

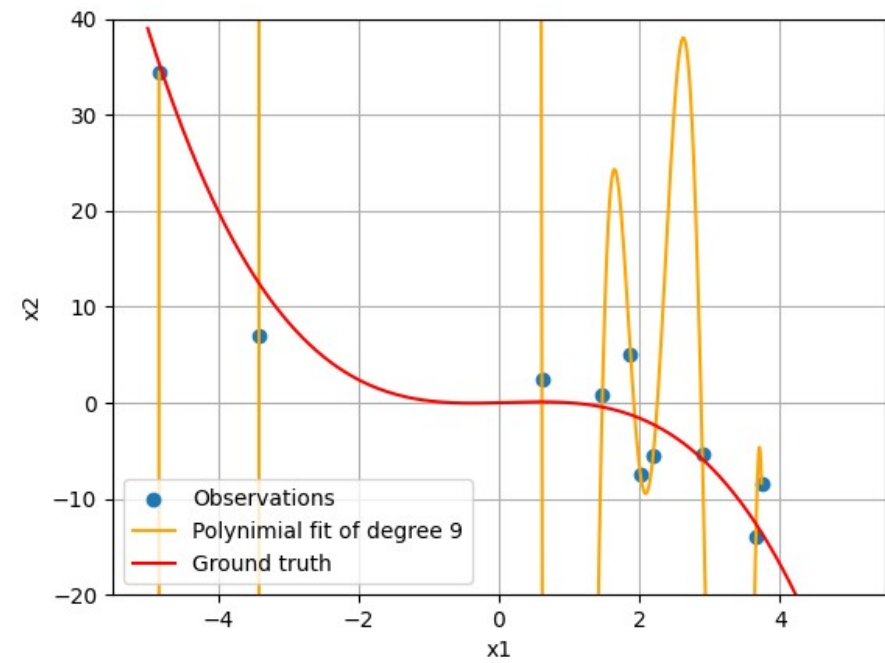


Figure 6: 9 Degree Polynomial

Exercise 2:

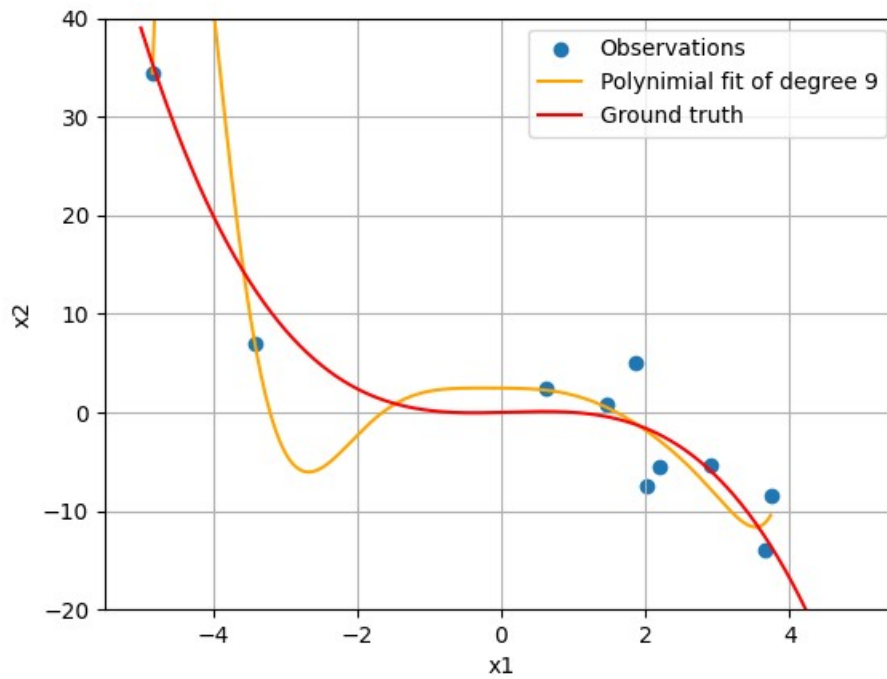


Figure 7: 10, L2 Regularization (Ridged)

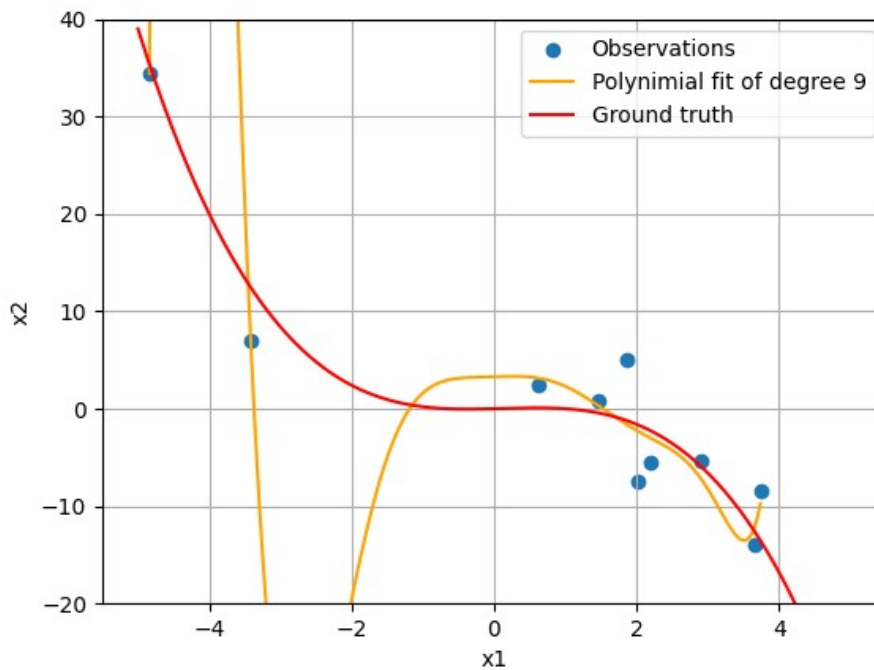


Figure 8: 1, L2 Regularization (Ridge)

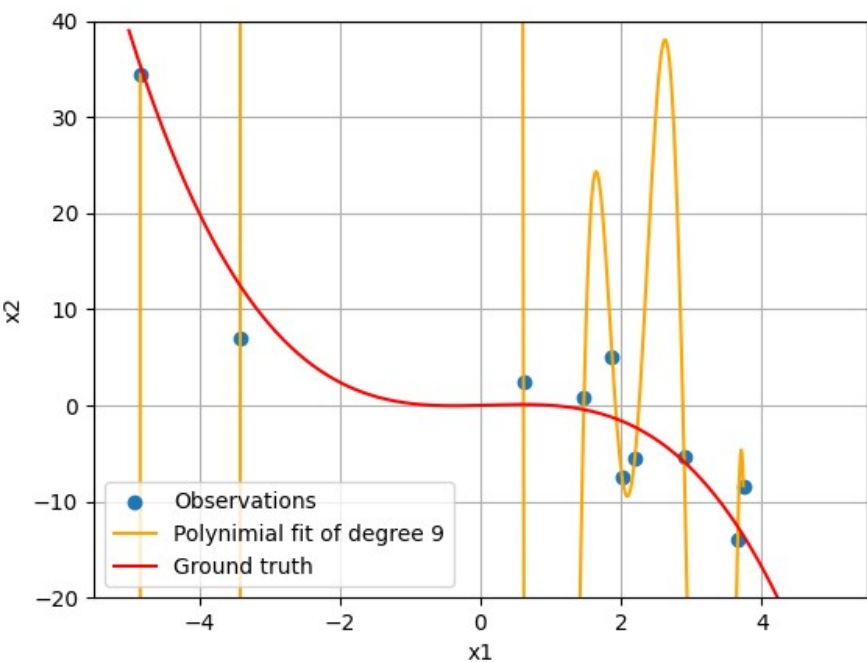
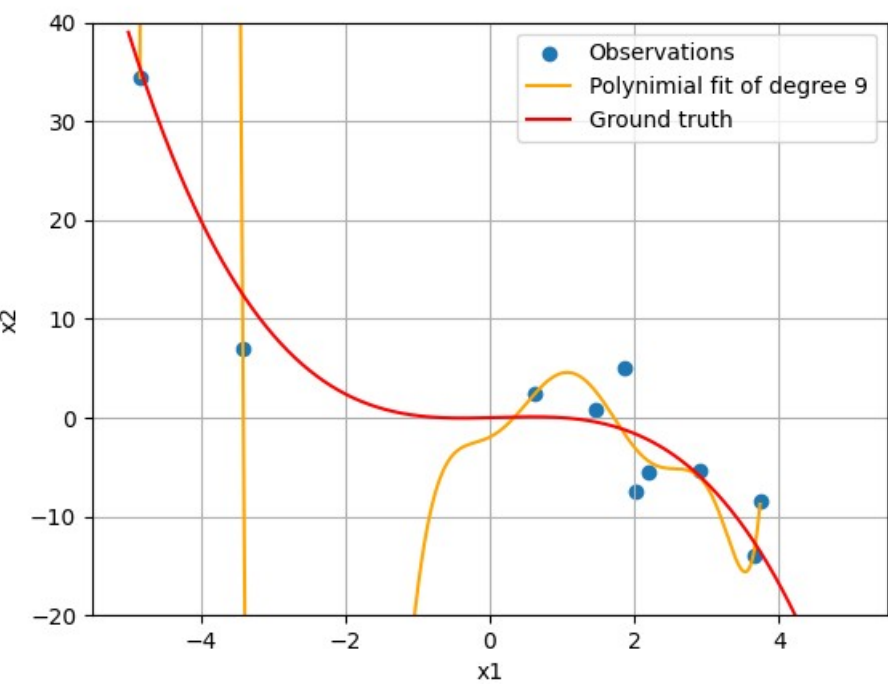


Figure 9: 0.1, L2 Regularization (Ridge)



Group: Johan Theil, Marcus Hodal, Mikkel Nielsen

Figure 10: 0.01, L2 Regularization (Ridge)

Exercise 3:

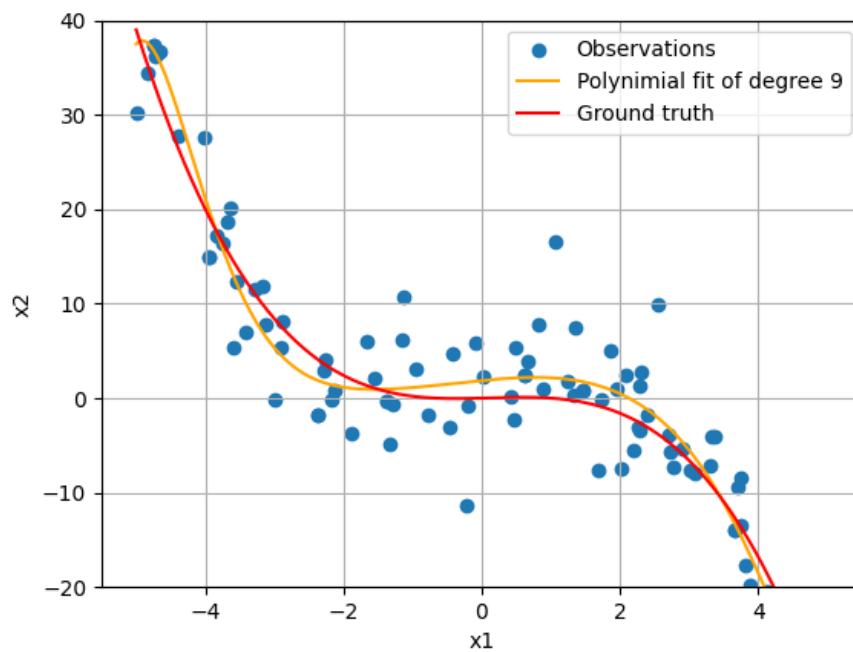


Figure 11: 100 Samples

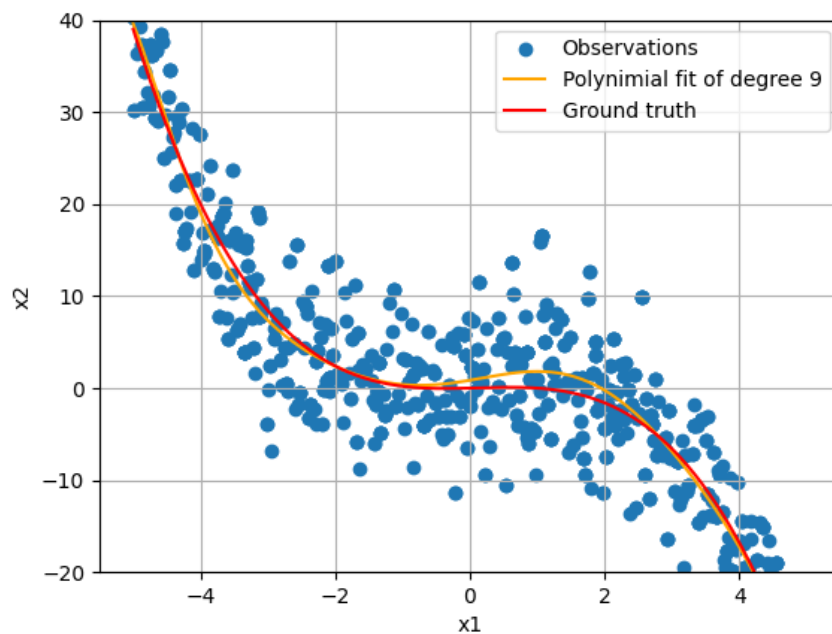


Figure 12: 1000 Samples

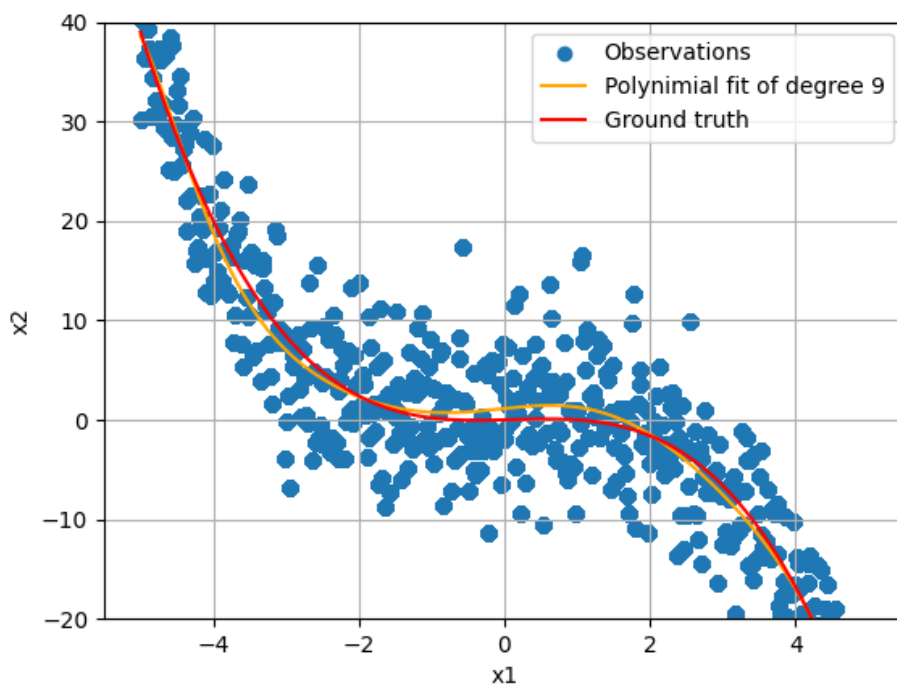


Figure 13: 10e5 Samples