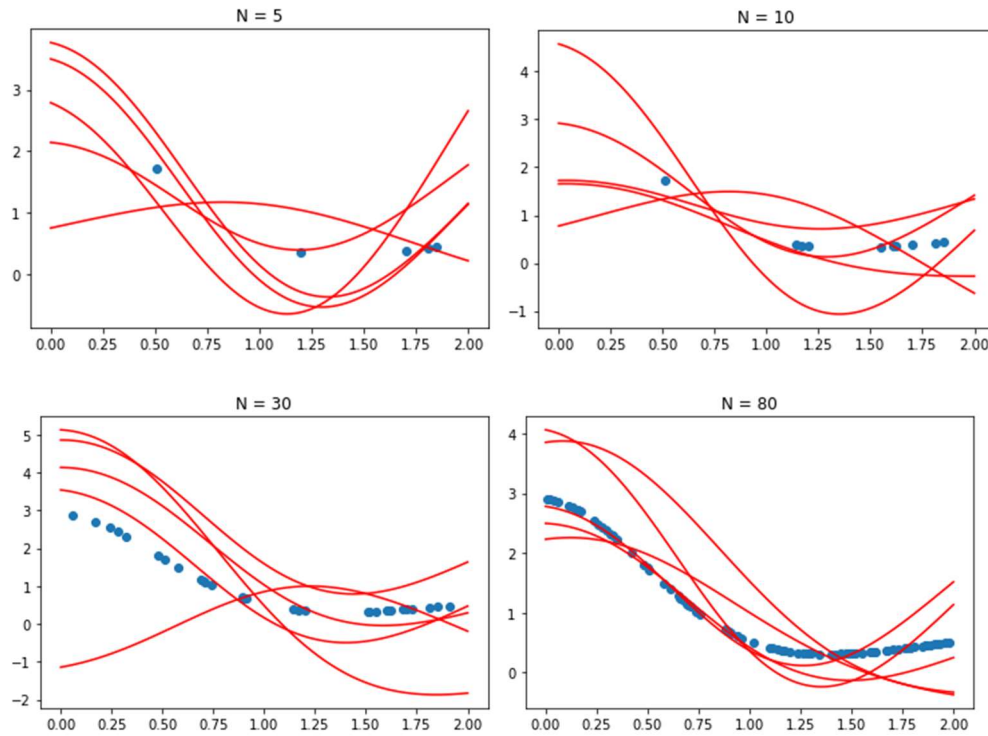


ML HW2

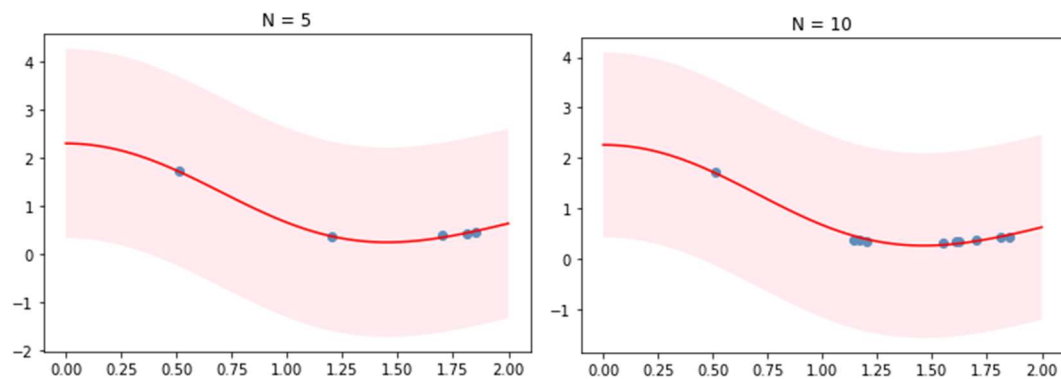
309513121 李偉齊

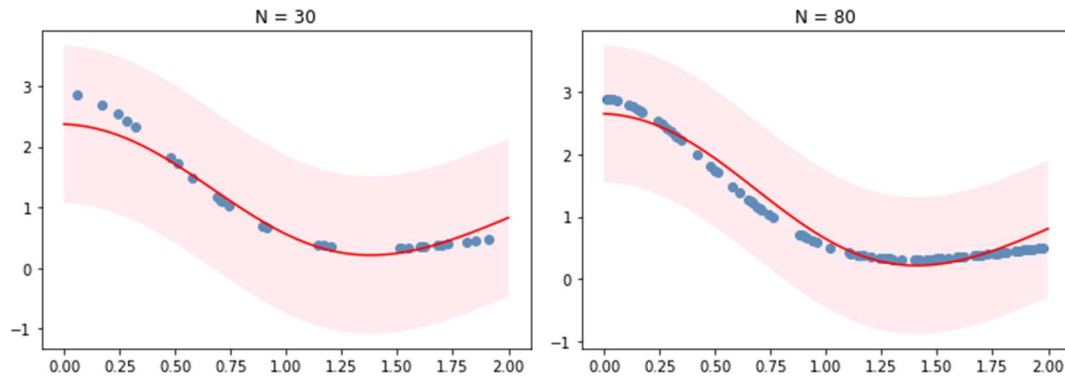
1. Sequential Bayesian Learning

(1) Plot five curves sampled from the parameter posterior distribution and N data points

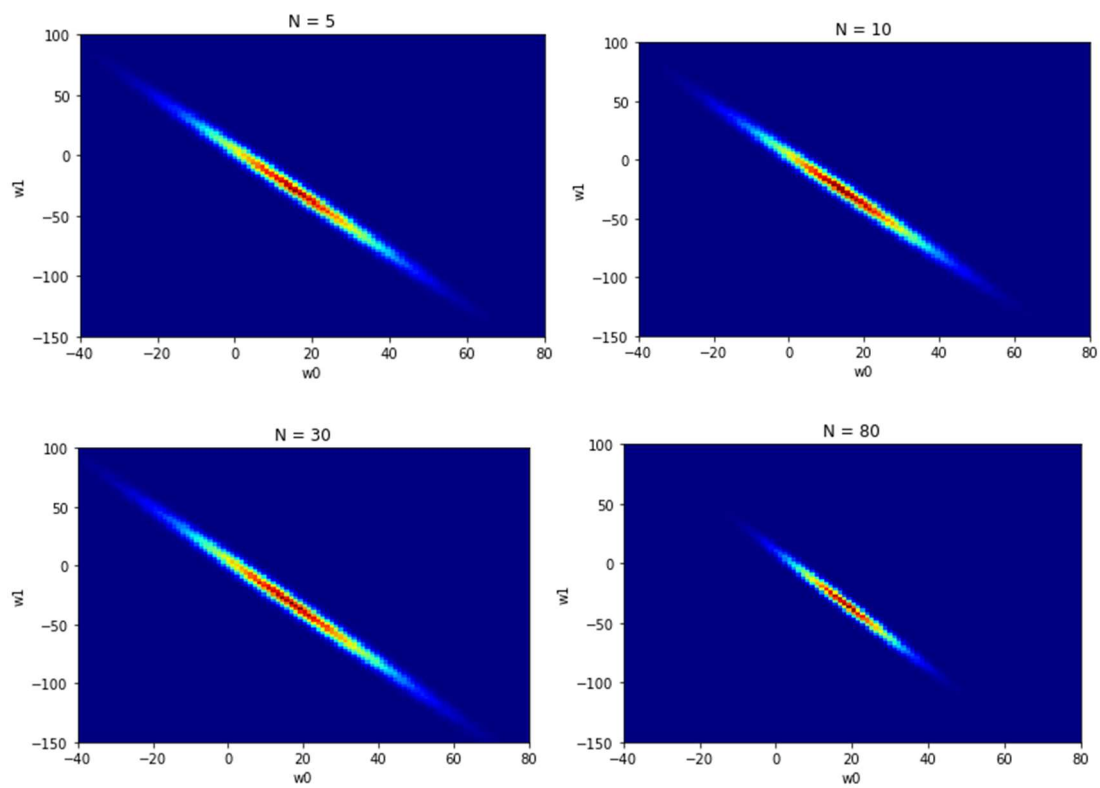


(2) Plot the predictive distribution of target value t by showing the mean curve, the region of variance with one standard deviation on both sides of the mean curve and N data points





(3) Plot the prior distributions by arbitrarily selecting two weights



(4) Make some discussion on the results of different N in 1, 2 and 3

Ans:

As the results in the above pictures, we can know that the bigger N we choose, the better effect will be present. Namely, the more data we consider to train, the answer will more converge to the original distribution.