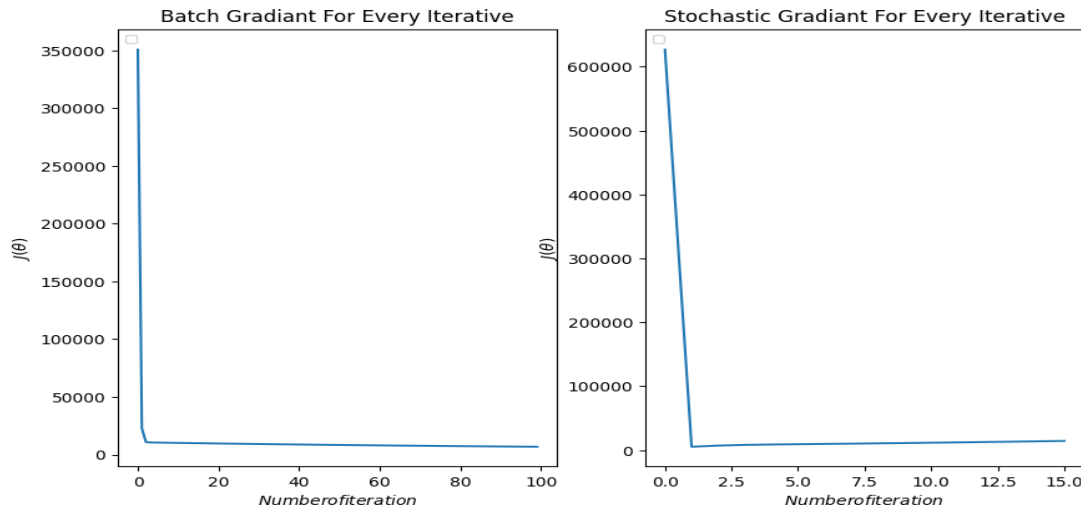


Name: Udom Phay

1. Task 1

- 1.1. I ran all the methods and have graphed Batch and Sochastic gradient for each iterations.



- 1.2. MSE of all batch/sochastic gradient and normal equation. Alpha for all test are .001.

MSE Batch Gradient = 0.008273670892555679

MSE Sochastic Gradient = 0.01741907456955815

MSE Normal Equation = 0.06995673336939738

2. Task 2

- 2.1. I removed the first feature and then normalized the data. Below is the result:

MSE Batch Gradient: 0.03478644177798839

MSE Sochastic Gradient: 0.006116432979493957

- 2.2. Normalizing the data seems to have lowered/improved the MSE value. I think it removed the intersect constant for the hypothesis, the intersect at theta 0.

3. Task 3

- 3.1. I set the datum to 0.856, and the bandwidth to the average of the testing output. This is the MSE LWR Sochastic Gradient: 0.037666203222007706