Answer 4

(a).

Values of intercept and coefficient obtained in Gradient Descent methods are slightly away from the values obtained from OLS method. For Linear Regression, where loss function can always be expressed as sum of squares of errors, will always be a convex error function. So OLS model is more reliable in general for Linear Regression. Stochastics Model is more reliable and can even be applicable for problems where we cannot achieve gradient to 0 for a given error functions. So both are reliable, but in different domains.

(b)

For T-Statistics, please follow as below



