Question 3

Report the average mean squared error on test set of each method as well as parameters. Which approach is best.

For data A. ⟹ Linear Regression MSE = 3.2474
Ridge Regression (parameter = 10) MSE = 2.78
Lasso Regression (parameter = 0.01) MSE = 2.82

For data B ⟹ Linear Regression MSE = 2.743
Ridge Regression (parameter = 10) MSE = 2.060
Lasso Regression (parameter = 0.01) MSE = 1.904

For data C ⟹ Linear Regression MSE = 506.60
Ridge Regression (parameter = 0.001) MSE = 506.
Lasso Regression (parameter = 0.1) MSE = 1.2486

For data A, Ridge regression works best due to low MSE
For data B, Lasso regression works best due to low MSE
For data C, Lasso regression works best due to low MSE