The insurance.csv dataset contains 1338 observations (rows) and 7 features (columns). The dataset contains 4 numerical features (age, bmi, children and expenses) and 3 nominal features (sex, smoker and region) that were converted into factors with numerical value designated for each level.

Perform exploratory analysis on different features to observe their relationship. Implement multiple regression model using required features of individual such as age, physical/family condition and location against their existing medical expense to be used for predicting future medical expenses of individuals that help medical insurance to make decision on charging the premium.

Implement the following tasks.

1. Predict the premium charges for the following features using gradient descent model
2. Age=32 sex=female bmi=33.27 children=2 smoker=yes region=southwest
3. Age=85 sex=male bmi=39.27 children=3 smoker=no region=southwest
4. Evaluate the model using different metrics.
5. Compare least squares method on multiple regression with lasso regression and write your observations.