Consider predicting the price of a new car based on predictor mileage using observations from the dataframe `Cars93` from the *R* library `MASS`.

Fit a simple regression model (m1) with predictor MPG.city. Fit a second simple regression model (m2) with predictor MPG.highway. From the two models (m1 and m2)

1. Show the least squares fitted lines on the same scatter plot (use red color for city, and blue color for highway mileage).
2. Comment about regression assumptions using residual plots.
3. Identify the largest outliers (report manufacturer, model, price, mileages, and Origin).
4. Interpret the regression equation
5. Interpret the model adequacy values (S, MSE, R^2). Which model fits best?
6. Estimate the mean price of a new car with 27.5 mileage. Also construct a 95% confidence interval for that mean price.
7. Predict the exact price of a new car with 27.5 mileage. Also construct a 95% prediction interval for that exact price.

newval2 = dataframe(MPG.highway = 27.5)
predict(m2, newval2, interval="pred")
price of a car.
prediction interval
conf
conf"
mean price