Linear and Logistic Regression Exercise: least squares regression

**## Use the /states.rds/ data set. Fit a model predicting energy consumed**

**## per capita (energy) from the percentage of residents living in**

**## metropolitan areas (metro). Be sure to**

**## 1. Examine/plot the data before fitting the model**

**## 2. Print and interpret the model `summary'**

**## 3. `plot' the model to look for deviations from modeling assumptions**

**## Select one or more additional predictors to add to your model and**

**## repeat steps 1-3. Is this model significantly better than the model**

**## with /metro/ as the only predictor?**

# summary of energy and metro columns, all rows

sts.en.met <- subset(states.data, select = c("energy", "metro"))

summary(sts.en.met)

# correlation between energy and metro

cor(sts.en.met)

#scatter plot of energy and metro

plot(sts.en.met)

# Fit our regression model

met.mod <- lm(metro ~ energy, # regression formula

data=states.data)

summary(met.mod)