

Assignment 4: Linear Models

January 15, 2019

Linear Models Homework

Consider the `comic_characters` data that we encountered previously.

1. Prepare the data by cleaning up the categories.
 - a. eye has some problems
 - b. collapse categories in eye, hair and sex respectively.
2. Explore this data using the tools of `dplyr` and the `summarise()` function.
3. Find out what things are most correlated.
4. Perform univariate regressions.
 - a. Use `glance` to determine which has the strongest fit.
 - b. Use `glance` to determine which has the weakest fit.
5. Build a multivariate linear regression.
6. With the model that `lasso` returns, fit a model using `lm` with the same covariates and then comment on how assumptions of linear regression were met.