

# Math456 Math Modeling Team-essay 1:

The following article is from,

<http://www.sthda.com/english/articles/40-regression-analysis/167-simple-linear-regression-in-r/>

<http://www.john-ros.com/Rcourse/lm.html>

Project-1: Please read the above articles through the links to understand how to use simple linear regression model to make a forecasting. You may download some data for simple linear regression from internet and follow the structure as the article to complete the project.

## Instruction of the essay

1. You can name your own article title
2. Structure of the essay, six parts, each part is worth 1 point. Total 6 points, if pass the final defense, then +4 points=10 points.

### (1) Introduction

Formula and basics

Loading required R packages

### (2) Data description

Examples of data and problem

Visualization

### (3) Analysis

Computation

Interpretation

### (4) Model evaluation

Regression line

Model assessment

Model summary

Coefficients significance

Prediction and Model accuracy

### (5) Conclusion

Summary

### (6) Reference

Data set: there are 12 data sets for simple linear regression

[https://college.cengage.com/mathematics/brase/understandable\\_statistics/7e/students/datasets/slr/frame.html](https://college.cengage.com/mathematics/brase/understandable_statistics/7e/students/datasets/slr/frame.html)

<http://www.statsci.org/data/first.html>