Simple Regression Analysis

Abstract

Having learned the basic tools used in workflow reproducibility, the next step is to start applying the computational toolkit and R programming to reproduce a simple regression analysis. This report will replicate the regression analysis performed in Chapter 3 (Linear Regression) of the textbook, "An Introduction to Statistical Learning".

Introduction

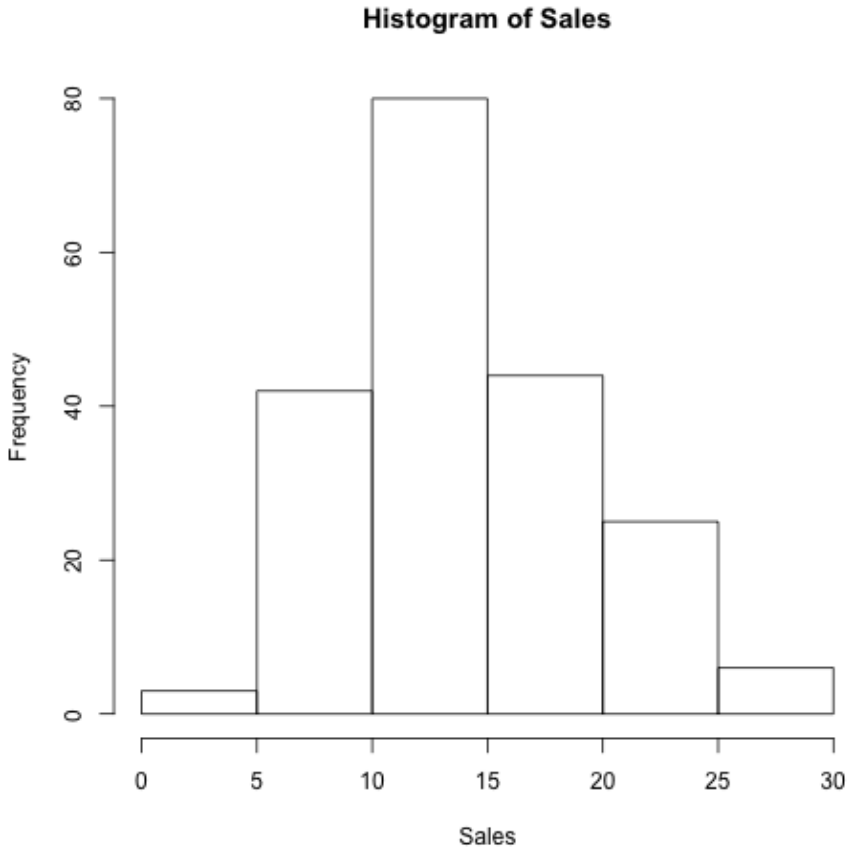
This analysis involves fitting a linear regression model to predict Sales onto a p

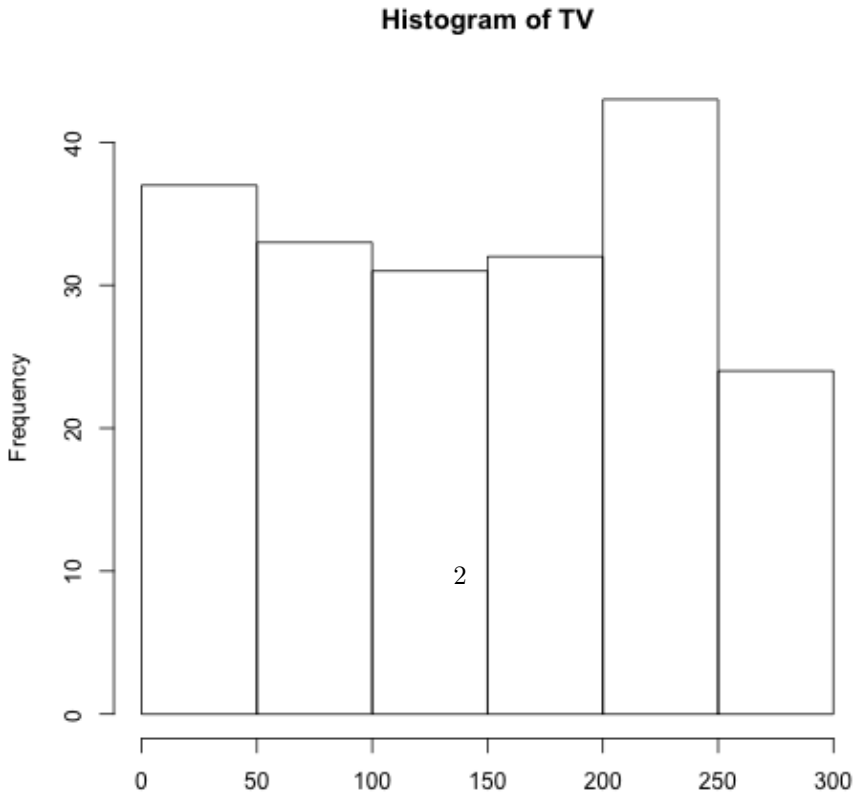
Data

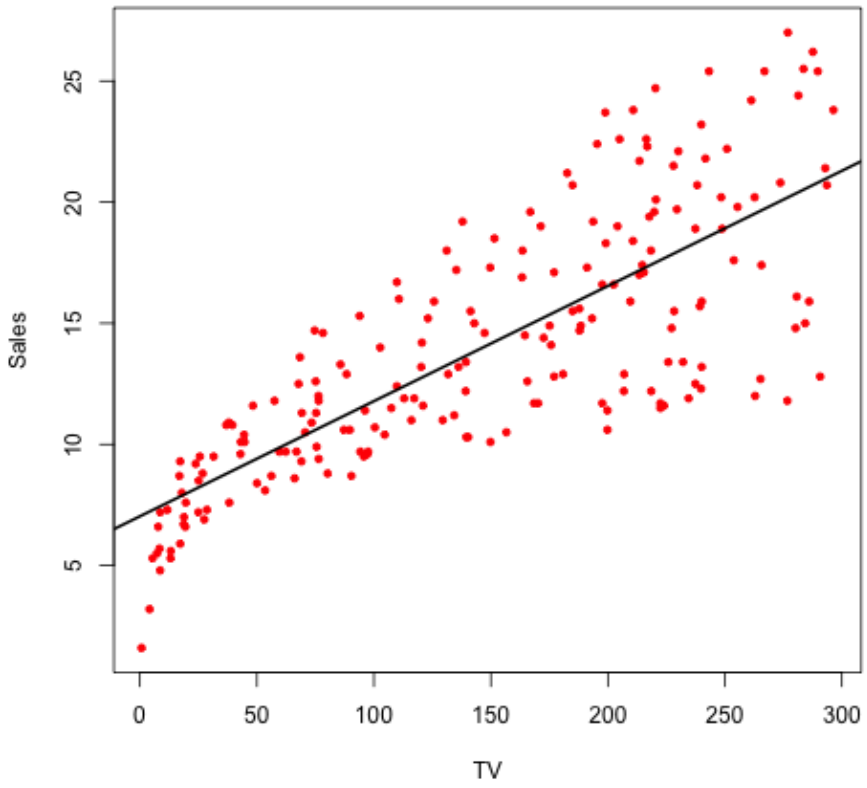
Methodology

Coefficients	Estimate	Std. Error	t-statistic	p-value
Intercept	7.0325	0.4578	15.36	<0.0001
TV	0.0475	0.0027	17.67	<0.0001

Quantity	Value
Residual Standard Error	3.259
R-squared	0.612
F-statistic	312.1


Histogram of Sales
Frequency
0
20
40
60
80
0
5
10
15
20
25
30
Sales


Histogram of TV
Frequency
0
10
20
30
40
0
50
100
150
200
250
300



Results

Conclusions