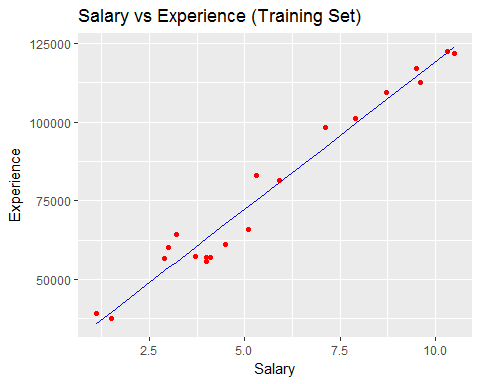
Simple\_linear\_regression\_.R

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Wed Sep 20 23:21:19 2017

#Simple Linear Regression to find the relationship between Job Experience and Salary  
  
# Importing the dataset  
dataset = read.csv('Salary\_Data.csv')  
  
# Splitting the dataset into the Training set and Test set  
# install.packages('caTools')  
library(caTools)  
set.seed(123)  
split = sample.split(dataset$Salary, SplitRatio = 2/3)  
training\_set = subset(dataset, split == TRUE)  
test\_set = subset(dataset, split == FALSE)  
  
#Fitting simple linear regression model  
regressor = lm(formula = Salary ~ YearsExperience,  
 data = training\_set)  
  
#Predicting the Test set results  
y\_pred = predict(regressor, newdata = test\_set)  
  
#Visualising the training data set  
#install.packages('ggplot2')  
library(ggplot2)  
ggplot() +  
 geom\_point(aes(x = training\_set$YearsExperience, y = training\_set$Salary),  
 colour = 'red') +  
 geom\_line(aes(x = training\_set$YearsExperience, y = predict(regressor, newdata = training\_set)),  
 colour = 'blue') +   
 ggtitle('Salary vs Experience (Training Set)') +  
 xlab('Salary') +  
 ylab('Experience')



#Visualising the test data set  
#install.packages('ggplot2')  
library(ggplot2)  
ggplot() +  
 geom\_point(aes(x = test\_set$YearsExperience, y = test\_set$Salary),  
 colour = 'red') +  
 geom\_line(aes(x = training\_set$YearsExperience, y = predict(regressor, newdata = training\_set)),  
 colour = 'blue') +   
 ggtitle('Salary vs Experience (Test Set)') +  
 xlab('Salary') +  
 ylab('Experience')

