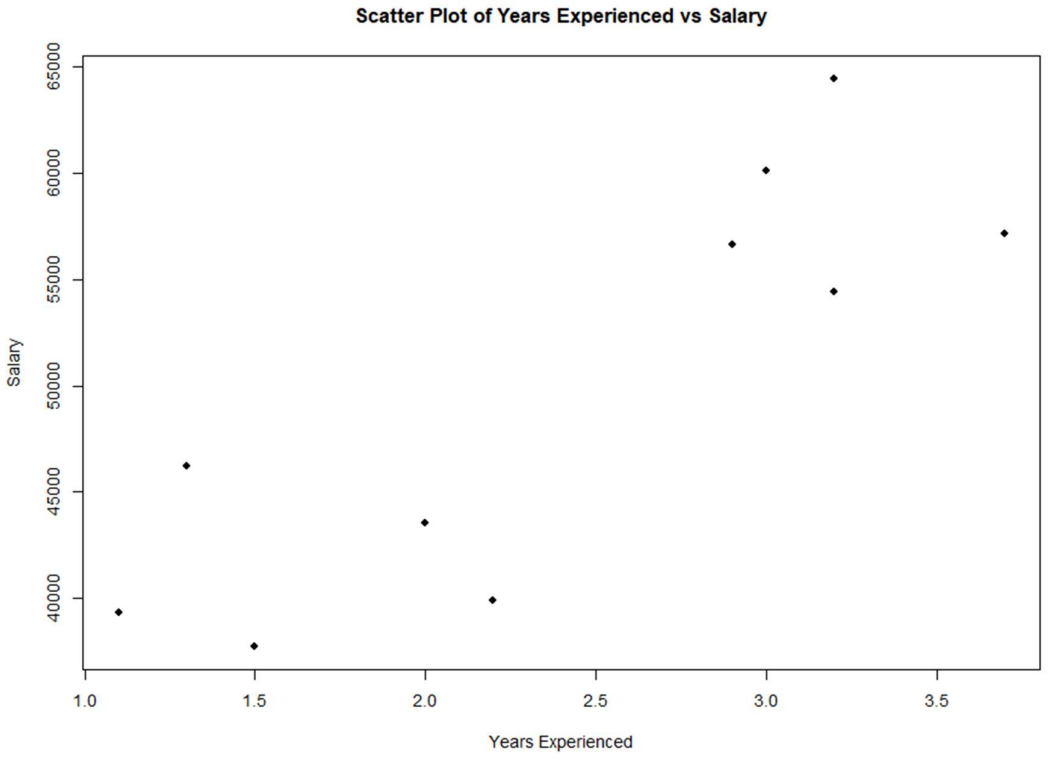
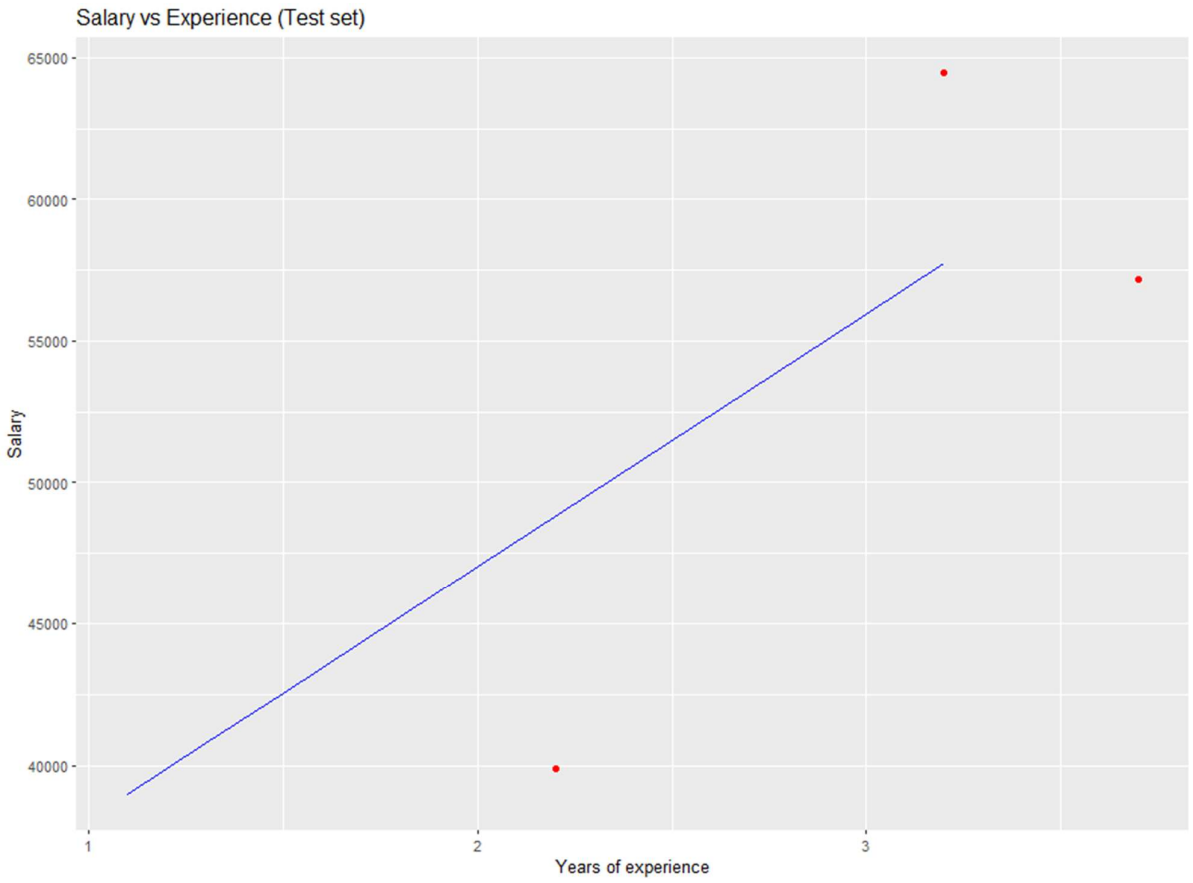
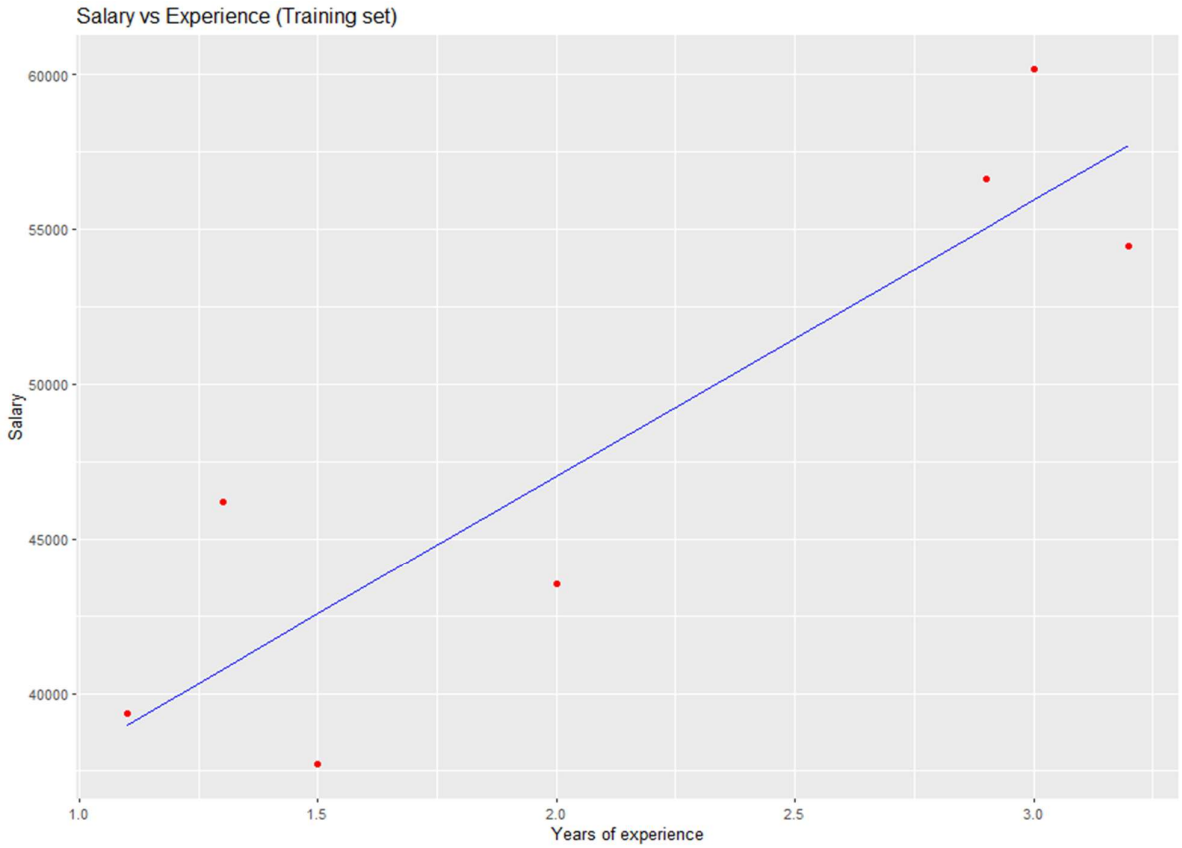
```
> # Loading package
> library(caTools)
> # Create the data frame
> data <- data.frame(
+   Years_Exp = c(1.1, 1.3, 1.5, 2.0, 2.2, 2.9, 3.0, 3.2, 3.2, 3.7),
+   Salary = c(39343.00, 46205.00, 37731.00, 43525.00,
+              39891.00, 56642.00, 60150.00, 54445.00, 64445.00, 57189.00)
+ )
> # Create the scatter plot
> plot(data$Years_Exp, data$Salary,
+      xlab = "Years Experienced",
+      ylab = "Salary",
+      main = "Scatter Plot of Years Experienced vs Salary")
> split = sample.split(data$Salary, SplitRatio = 0.7)
> trainingset = subset(data, split == TRUE)
> testset = subset(data, split == FALSE)
> # Fitting Simple Linear Regression to the Training set
> lm.r= lm(formula = Salary ~ Years_Exp,
+          data = trainingset)
> coef(lm.r)
(Intercept)   Years_Exp
  31117.750    7844.474
> # Predicting the Test set results
> ypred = predict(lm.r, newdata = testset)
> library(ggplot2)
> # Visualising the Training set results
> ggplot() +
+   geom_point(aes(x = trainingset$Years_Ex, y = trainingset$Salary),
+              colour = 'red') +
+   geom_line(aes(x = trainingset$Years_Ex,y = predict(lm.r, newdata = trainingset)),
+             colour = 'blue') +
+   ggtitle('Salary vs Experience (Training set)') +
+   xlab('Years of experience') +
+   ylab('Salary')
> # Visualising the Test set results
> ggplot() +
+   geom_point(aes(x = testset$Years_Exp, y = testset$Salary),
+              colour = 'red') +
+   geom_line(aes(x = trainingset$Years_Exp,
+                 y = predict(lm.r, newdata = trainingset)),
+             colour = 'blue') +
+   ggtitle('Salary vs Experience (Test set)') +
+   xlab('Years of experience') +
+   ylab('Salary')
>
```




Salary vs Experience (Test set)
65000
60000
55000
50000
45000
40000
Salary
1
2
3
Years of experience


Salary vs Experience (Training set)
60000
55000
50000
45000
40000
Salary
1.0
1.5
2.0
2.5
3.0
Years of experience