

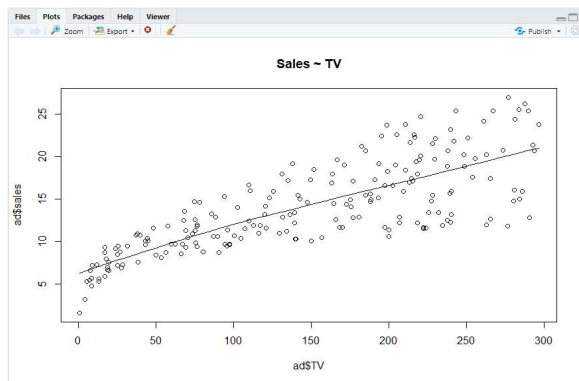
Md Reza

Lab_Exercise_1: Plot of Linear Model

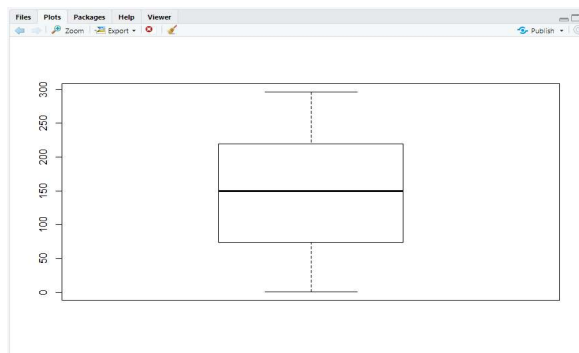
Due Date: 09-21-2019

Exploratory Data Analysis

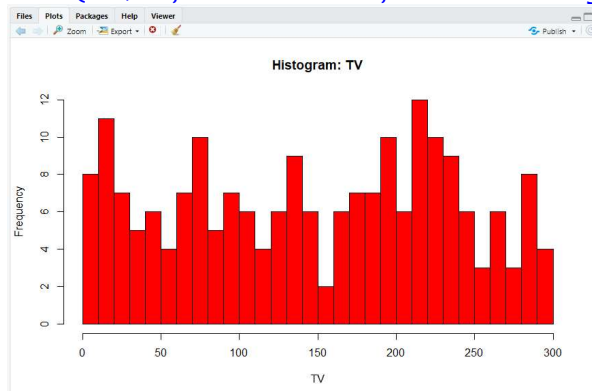
```
scatter.smooth(x=ad$TV, y = ad$sales, main = "Sales ~ TV")
```



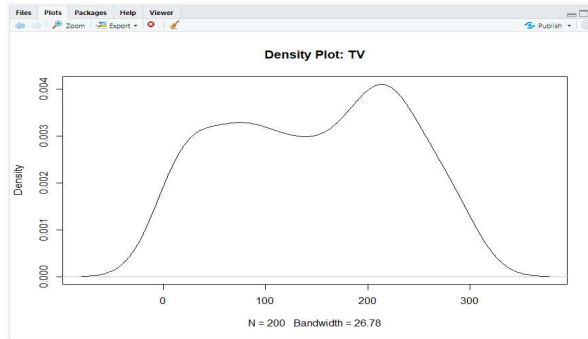
```
boxplot(ad$TV)
```



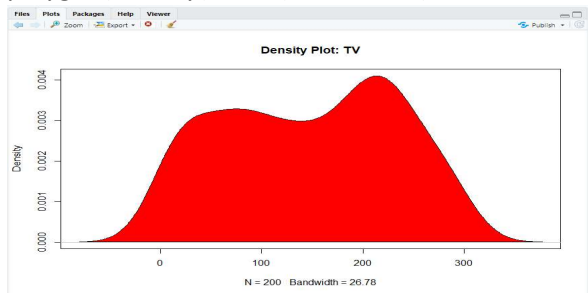
```
hist(ad$TV, breaks = 30, main="Histogram: TV", xlab="TV", col='red')
```



```
plot(density(ad$TV), main="Density Plot: TV")
```

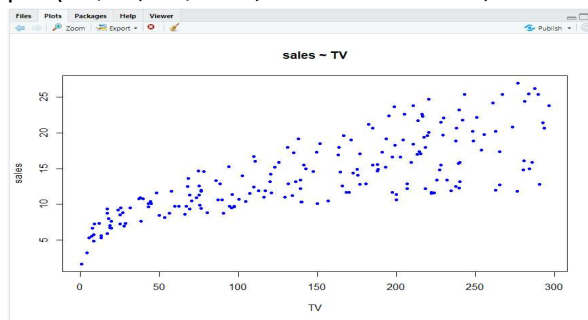


```
polygon(density(ad$TV), col = 'red')
```



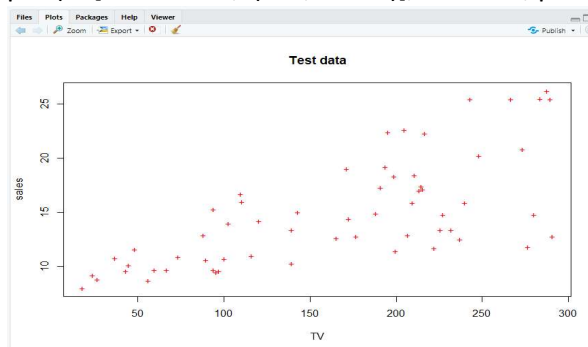
```
# Plot the model fit, to save topdf, uncomment the pdf() and dev.off() lines
```

```
plot(ad$TV, ad$sales, main="sales ~ TV", xlab="TV", ylab="sales", col='blue', pch=20)
```

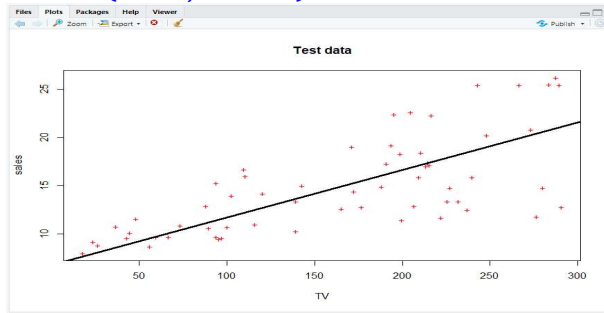


```
# Plot the prediction
```

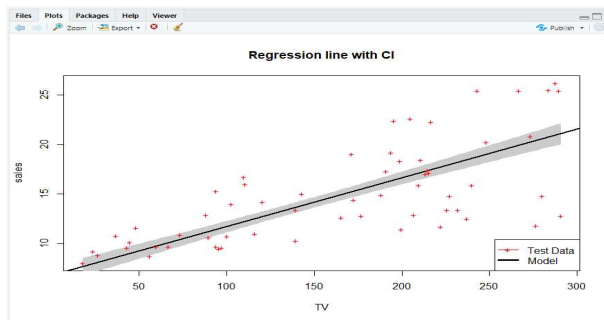
```
plot(ad[-trainIndex,c('TV', 'sales')], col='red', pch="+", main="Test data")
```



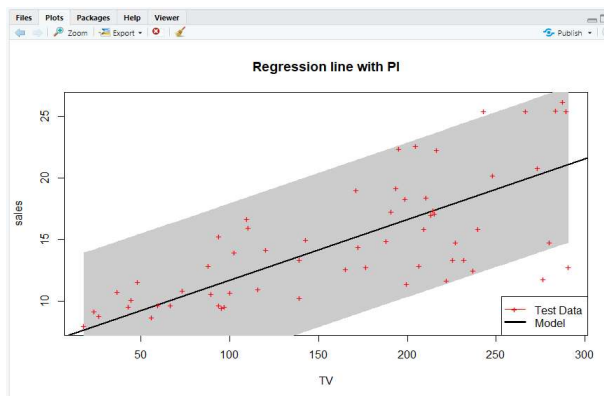
```
abline(mod2, lwd=3)
```



```
# Confidence Interval
```



```
Prediction Interval
```



```
# Exercise:
```

```
# Add training data points to the above plot and in the legend
```

