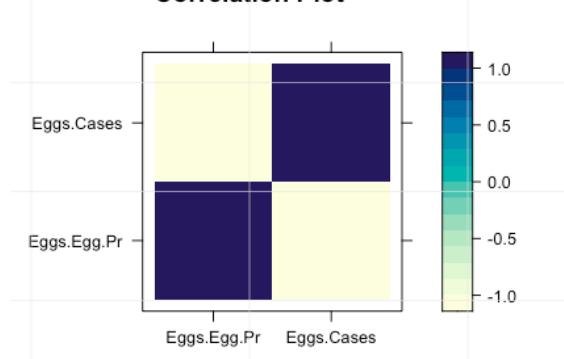
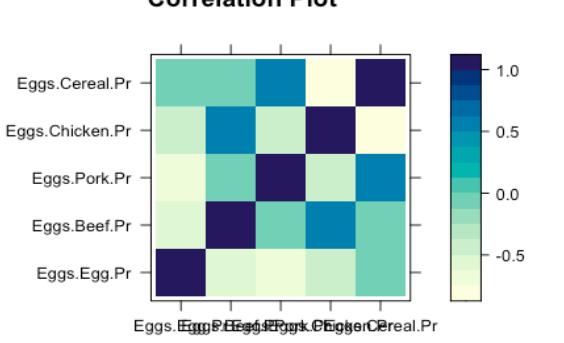


Exercise1

Code	Chart
<pre>library(lattice) xx <- c(9.20, 6.00, 6.00, 11.25, 11.00, 7.25, 9.7, 13.25, 14.00, 8.00) histogram(~ xx, main="Histogram of xx", xlab="xx", ylab="Frequency",type="count", breaks = c(6, 8, 10, 12, 14),right = F,col="gray")</pre>	<p>Histogram of xx</p> <p>A histogram titled "Histogram of xx" with the x-axis labeled "xx" and the y-axis labeled "Frequency". The x-axis ranges from 6 to 14 with major ticks at 6, 8, 10, 12, and 14. The y-axis ranges from 0.0 to 3.0 with major ticks every 0.5 units. The histogram has five bars. The first bar (6-8) has a frequency of 3.0. The second bar (8-10) has a frequency of 3.0. The third bar (10-12) has a frequency of 2.0. The fourth bar (12-14) has a frequency of 2.0. The fifth bar (14-16) has a frequency of 2.0.</p>
<pre>library(lattice) set.seed(591) xx1 <- rnorm(20, mean = 3, sd = 3.6) xx2 <- rpois(40, lambda = 3.5) xx3 <- rchisq(31, df = 5, ncp = 0) df1 <- data.frame(xx1, levels ="Group-1") df2 <- data.frame(xx2, levels ="Group-2") df3 <- data.frame(xx3, levels ="Group-3") colnames(df1) <- c("Data","Group") colnames(df2) <- c("Data","Group") colnames(df3) <- c("Data","Group") df <- bind_rows(df1,df2,df3) bwplot(Data~Group,df)</pre>	<p>A box plot titled "bwplot(Data~Group,df)" showing the distribution of Data for three groups: Group-1, Group-2, and Group-3. The y-axis is labeled "Data" and ranges from 0 to 15 with major ticks at 0, 5, 10, and 15. The x-axis labels are "Group-1", "Group-2", and "Group-3". Each group has a blue box representing the interquartile range, a black dot representing the median, and a horizontal dashed line representing the whiskers. Outliers are shown as open circles. Group-1 has a median of approximately 4. Group-2 has a median of approximately 4. Group-3 has a median of approximately 4.</p>

Exercise2

Code	Chart																																				
<pre>Eggs<-read.csv("http://jolej.linuxpl.info/Eggs.csv", header=TRUE) library(lattice) a1<-data.frame(Eggs\$Egg.Pr,Eggs\$Cases) corMatrix <- cor(a1) levelplot(corMatrix, xlab = " ", ylab = " ", main = "Correlation Plot") trellis.par.set(panel.grid = panel.grid(lty = 1, lwd = 0.5))</pre>	<p>Correlation Plot</p>  <p>A correlation matrix plot comparing two variables: Eggs.Cases and Eggs.Egg.Pr. The plot is a square heatmap where the diagonal elements are dark blue (representing a correlation of 1.0). The off-diagonal elements show a strong negative correlation, indicated by light yellow squares. A color scale bar on the right side ranges from -1.0 (light yellow) to 1.0 (dark blue).</p> <table border="1"><caption>Approximate Correlation Matrix Data</caption><thead><tr><th></th><th>Eggs.Cases</th><th>Eggs.Egg.Pr</th></tr></thead><tbody><tr><th>Eggs.Cases</th><td>1.0</td><td>-0.8</td></tr><tr><th>Eggs.Egg.Pr</th><td>-0.8</td><td>1.0</td></tr></tbody></table>		Eggs.Cases	Eggs.Egg.Pr	Eggs.Cases	1.0	-0.8	Eggs.Egg.Pr	-0.8	1.0																											
	Eggs.Cases	Eggs.Egg.Pr																																			
Eggs.Cases	1.0	-0.8																																			
Eggs.Egg.Pr	-0.8	1.0																																			
<pre>Eggs<-read.csv("http://jolej.linuxpl.info/Eggs.csv", header=TRUE) library(lattice) a2<-data.frame(Eggs\$Egg.Pr,Eggs\$Beef.Pr,Eggs\$Pork.Pr,Eggs\$Chicken.Pr,Eggs\$Cereal.Pr) corMatrix <- cor(a2) levelplot(corMatrix, xlab = " ", ylab = " ", main = "Correlation Plot") trellis.par.set(panel.grid = panel.grid(lty = 1, lwd = 0.5))</pre>	<p>Correlation Plot</p>  <p>A correlation matrix plot comparing five variables: Eggs.Cereal.Pr, Eggs.Chicken.Pr, Eggs.Pork.Pr, Eggs.Beef.Pr, and Eggs.Egg.Pr. The plot shows a complex pattern of correlations. The diagonal elements are dark blue (1.0). The correlation between Eggs.Egg.Pr and the other variables is generally low, indicated by light green and yellow squares. The correlation between the meat products (Beef, Pork, Chicken) and the cereal product is moderate, shown in shades of teal and blue. A color scale bar on the right side ranges from -0.5 (light green) to 1.0 (dark blue).</p> <table border="1"><caption>Approximate Correlation Matrix Data</caption><thead><tr><th></th><th>Eggs.Cereal.Pr</th><th>Eggs.Chicken.Pr</th><th>Eggs.Pork.Pr</th><th>Eggs.Beef.Pr</th><th>Eggs.Egg.Pr</th></tr></thead><tbody><tr><th>Eggs.Cereal.Pr</th><td>1.0</td><td>0.5</td><td>0.5</td><td>0.5</td><td>0.2</td></tr><tr><th>Eggs.Chicken.Pr</th><td>0.5</td><td>1.0</td><td>0.5</td><td>0.5</td><td>0.2</td></tr><tr><th>Eggs.Pork.Pr</th><td>0.5</td><td>0.5</td><td>1.0</td><td>0.5</td><td>0.2</td></tr><tr><th>Eggs.Beef.Pr</th><td>0.5</td><td>0.5</td><td>0.5</td><td>1.0</td><td>0.2</td></tr><tr><th>Eggs.Egg.Pr</th><td>0.2</td><td>0.2</td><td>0.2</td><td>0.2</td><td>1.0</td></tr></tbody></table>		Eggs.Cereal.Pr	Eggs.Chicken.Pr	Eggs.Pork.Pr	Eggs.Beef.Pr	Eggs.Egg.Pr	Eggs.Cereal.Pr	1.0	0.5	0.5	0.5	0.2	Eggs.Chicken.Pr	0.5	1.0	0.5	0.5	0.2	Eggs.Pork.Pr	0.5	0.5	1.0	0.5	0.2	Eggs.Beef.Pr	0.5	0.5	0.5	1.0	0.2	Eggs.Egg.Pr	0.2	0.2	0.2	0.2	1.0
	Eggs.Cereal.Pr	Eggs.Chicken.Pr	Eggs.Pork.Pr	Eggs.Beef.Pr	Eggs.Egg.Pr																																
Eggs.Cereal.Pr	1.0	0.5	0.5	0.5	0.2																																
Eggs.Chicken.Pr	0.5	1.0	0.5	0.5	0.2																																
Eggs.Pork.Pr	0.5	0.5	1.0	0.5	0.2																																
Eggs.Beef.Pr	0.5	0.5	0.5	1.0	0.2																																
Eggs.Egg.Pr	0.2	0.2	0.2	0.2	1.0																																