06)

library(plotrix)

data<-(179718, 41370, 41914, 44280)

pct<-(data(sum(data))\*100

pct<-round(pct 12)

labels<-c("ARMY","NAVY","AIRFORCE","MARINE")

labels 1<-paste(labels,pct,"%")

pie 3D(

data,

shade=0.5,

labels = labels 1,

label col = "red",

label cex = 0.75,

)

07)

if(!require Namespace("quantmod"))install.packages("quantmod")

if(!require Namespace("corrplot"))install.packages("corrplot")

library(quantmod)

library(corrplot)

rates<-c("USD/EUR","USD/GBP","USD/CHF","USD/JPY","USD/CAD","USD/AUD","USD/IDR")

get symbols(rates,src = "oanada",return.class='xts')

fx data<-cbind(USDAUD,USDCAP,USDCHF,USDEUR,USDGBP,USDIDR,USDJPY)

fx cor<-cor(fx data,use= "Complete.obs")

par(mfrow= c(2,2))

corrplot(fx cor, method = "ellipse")

corrplot(fx cor, method = "number")

corrplot(fx cor, method = "square")

corrplot(fx cor, method = "square",type= "lower")

corrplot(fx cor, method = "number",order= "nclust",addred= 4,rect.col= "blue")

08)

df <- data.frame(

DATE = c("1/1/1967", "1/1/1968", "1/1/1970", "1/1/1971", "1/1/1972", "1/1/1975",

"1/1/1976", "1/1/1978", "1/1/1979", "1/1/1988", "1/1/1989", "1/1/1990",

"1/1/1991", "1/1/2000", "1/1/2001", "1/1/2010", "1/1/2011"),

Gini = c(0.397, 0.386, 0.394, 0.396, 0.401, 0.397, 0.398, 0.402, 0.404, 0.426,

0.431, 0.428, 0.428, 0.462, 0.466, 0.470, 0.477),

gdp\_ann = c(861.7, 942.5, 1075.9, 1167.8, 1282.4, 1688.6, 1877.6, 2356.6,

2632.2, 5252.6, 5657.7, 5979.6, 6174, 10289.7, 10625.3, 14958.3, 15533.8),

Presidents = c("Johnson", "Johnson", "Nixon", "Nixon", "Nixon", "Ford", "Ford",

"Carter", "Carter", "Reagan", "Reagan", "G. Bush", "G. Bush",

"Clinton", "Clinton", "Obama", "Obama")

)

plot(df$gdp\_ann, df$Gini,

main = "Scatter Plot of GDP vs Gini Index",

xlab = "GDP (in billions)",

ylab = "Gini Index",

pch = 19, col = "blue")

model <- lm(Gini ~ gdp\_ann, data = df)

abline(model, col = "red", lwd = 2)

text(df$gdp\_ann, df$Gini, labels = df$Presidents, pos = 4, cex = 0.8, col = "black")

legend("topleft",

legend = c("Data Points", "Regression Line"),

col = c("blue", "red"),

pch = c(19, NA),

lty = c(NA, 1),

bty = "n")

09)

data data.frame(

years = c(2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010,2011, 2012, 2013),

Jan = c(3,610,1188,1544,3013,847,372,263,389,524,357),

Feb = c(2,663,1284,1570,2673,1072,403,304,254,356,360),

Apr = c(3435,1303,1144, 1801, 2540,1299,567,385,289,392,545),

May = c(546,654,1392, 2272,2834,890,390,387,381,304,888),

Jun = c(597,901,1346,2571,2192,747,501,385,386,529,659 ),

Jul = c(647,825,1530, 3297,2690,643,407,443,308,469,1145),

Aug = c(794,877,2276,2865,2481,682,618,516,401,422,1012 ),

Sep = c(565,1033,1422,2562,1366,606,333,254,397, 396,1221),

Oct = c(517,1016,1298,2983,1295,590,435,312,366,290,1095),

Nov = c(486,1652,1467, 3077,1110,535,226,307,279,253,903),

Dec = c(526,1112, 1133,2891,987,582,475,218,388,275,983)

)

row.names (data)<- data$years

data-data[, -1]

heatmap(as.matrix(data),

Rowv NA, Colv = NA,

scale "column",

col heat.colors (256),

xlab "Body Count per Month",

ylab "Years")

10)

install.packages("quantmod")

library(quantmod)

prices <- "MSFT"

getSymbols(prices, src = "yahoo")

msft <- dailyReturn(MSFT[, "MSFT.Adjusted"], type = "log")

msft <- na.omit(as.numeric(msft))

fake <- rnorm(length(msft), mean = 0, sd = 1)

par(mfrow = c(1, 1)) # Single plot

qqplot(fake, msft, pch = 18, main = "Q-Q Plot: MSFT vs Fake (Normal)",

xlab = "Theoretical Quantiles (Fake)",

ylab = "Empirical Quantiles (MSFT)")

abline(0, 1, col = "red", lwd = 2)