



R Code for Examples in the book

"Statistics: The Art and Science of Learning from Data"

by Agresti, Franklin and Klingenberg, 5th edition

Chapter 3

Example 6: Internet and Facebook Use – Scatterplots

Reading in the data:

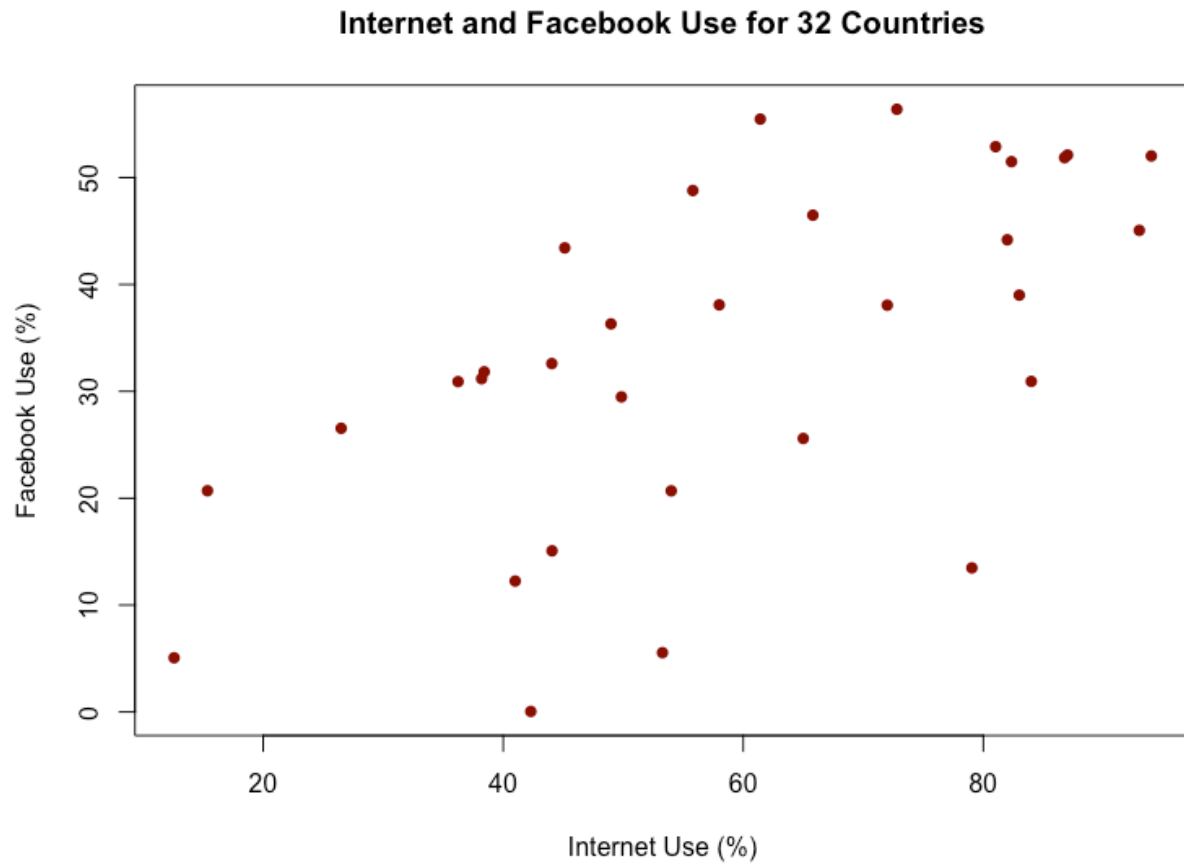
```
internet <-
read.csv(file='https://raw.githubusercontent.com/artofstat/data/master/Chapter3/InternetUse.csv')
colnames(internet) # To view the names of the variables in the dataset

## [1] "iso2c" "country"
## [3] "year" "Population.Size"
## [5] "GDP.in.billions.of..US"
"GDP.per.Capita.in.thousands.of..US"
## [7] "Internet.Users" "Internet.Penetration"
## [9] "Facebook.Users" "Facebook.Penetration"
## [11] "Broadband.Subscribers"

attach(internet) # so we can refer to variable names
```

Basic scatterplot

```
plot(x = Internet.Penetration, y = Facebook.Penetration, pch = 16, col =  
'darkred',  
     main = 'Internet and Facebook Use for 32 Countries',  
     xlab = 'Internet Use (%)', ylab = 'Facebook Use (%)')
```



Creating scatterplot through ggplot2

```
library(ggplot2)
ggplot(internet, aes(x = Internet.Penetration, y = Facebook.Penetration)) +
  geom_point(aes(color = 'darkred'), show.legend = FALSE) +
  labs(title='Internet and Facebook Use for 32 Countries',
       x = 'Internet Use (%)', y= 'Facebook Use (%)') +
  theme_classic() +
  scale_y_continuous(limits = c(-5,65),
                    breaks = seq(0,60,10),
                    expand = c(0,0)) +
  scale_x_continuous(limits = c(-5,105),
                    breaks = seq(0,100,10))
```

