R Code for Examples in the book
"Statistics: The Art and Science of Learning from Data"
by Agresti, Franklin and Klingenberg, 5th edition

Chapter 2

Example 11: CO_2 Pollution – Mean, Median, and Outliers

Read in CO2 pollution values:

```
co2 <- c(5.9, 1.8, 0.3, 1.4, 2.1, 0.4, 16.9, 0.8, 11.6)
```
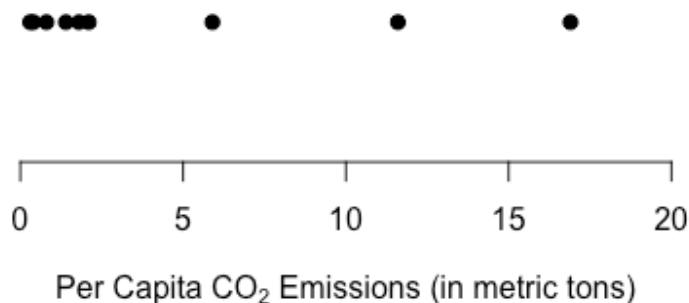
To find the Median:

```
median(co2)

## [1] 1.8
```

Create Dotplot:

```
stripchart(co2, method = 'stack', pch=19, frame.plot=FALSE,
           xlim = c(0, 20), ylim = c(0,3),
           main = 'Dotplot',
           xlab = expression('Per Capita CO'[2]*
                              ' Emissions (in metric tons)'))
```


Dotplot

Per Capita CO_2 Emissions (in metric tons)

```
library(ggplot2)
ggplot(data.frame(co2), aes(x = co2)) +
  geom_dotplot(binwidth = 0.1, dotsize = 4) +
  labs(x = expression('Per Capita CO'[2]*' Emissions (in metric tons)'),
       title = 'Dotplot', subtitle = expression('CO'[2]*' Pollution')) +
  theme_classic() +
  theme(axis.line.y=element_blank(),
        axis.text.y=element_blank(),
        axis.ticks.y=element_blank(),
        axis.title.y=element_blank()
        )
```

Dotplot

CO_2 Pollution

Per Capita CO_2 Emissions (in metric tons)