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 4: Health Value of Cereals – Dotplots
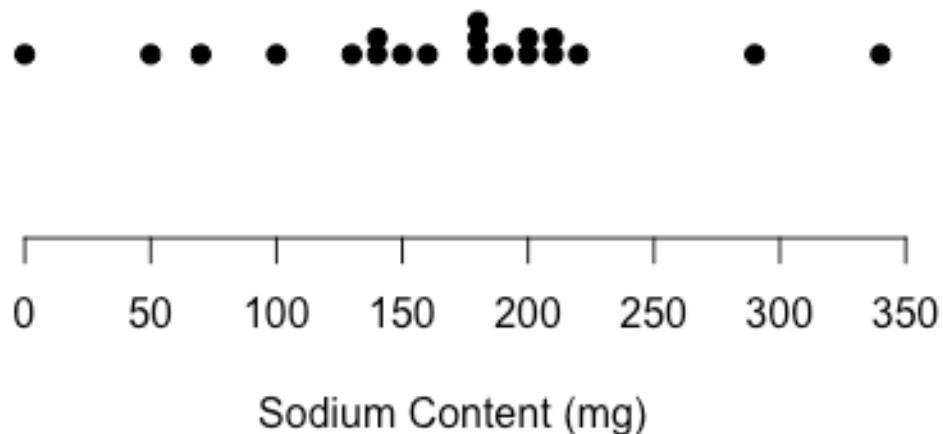
Reading in Sodium values:

```
sodium <- c(0, 340, 70, 140, 200, 180, 210, 150, 100, 130,
            140, 180, 190, 160, 290, 50, 220, 180, 200, 210)
```

Create basic dotplot:

```
stripchart(sodium, method = 'stack', pch=19, ylim=c(0,3), frame.plot=FALSE,
           main = 'Dotplot', xlab = 'Sodium Content (mg)')
```

You may have to resize the plotting window and then execute the command again for this plot to look nice. You may also have to try different values for ylim.

A slightly better dotplot can be obtained with the ggplot2 library. To install it, type install.packages('ggplot2').

```
library(ggplot2)
ggplot(data.frame(sodium), aes(x = sodium)) +
  geom_dotplot() +
  labs(x = 'Sodium Content (mg)', title = 'Dotplot',
       subtitle = 'Sodium Content of 20 Breakfast Cereals') +
  theme_classic() +
  theme(axis.line.y=element_blank(),
        axis.text.y=element_blank(),
        axis.ticks.y=element_blank(),
        axis.title.y=element_blank()
        )
```

Dotplot
Sodium Content of 20 Breakfast Cereals