Question 2.12

a. **[1 pt]** The number of loosestrife plants and the shadiness category for the 10th plot is shown below.

```
   lstrf shade
10    23     O
```

b. **[1 pt]** The number of loosestrife plants in each plot is shown below.

```
 [1] 13  2  1  0  9 11  5  5 14 23  0  2  3  3  6  7  4 16  1
```

c. **[1 pt]** The data for each completely shaded plot is shown below.

```
   lstrf shade
2      2     S
3      1     S
4      0     S
7      5     S
11     0     S
12     2     S
17     4     S
19     1     S
```

d. **[1 pt]** The data for each of the open plots is shown below.

```
   lstrf shade
1     13     O
5      9     O
6     11     O
9     14     O
10    23     O
18    16     O
```

e. **[1 pt]** The data for each open and partially shaded plot is shown below.

```
   lstrf shade
1     13     O
5      9     O
6     11     O
8      5     P
9     14     O
10    23     O
13     3     P
14     3     P
15     6     P
16     7     P
18    16     O
```

f. **[1 pt]** The data for each plot with more than 10 loosestrife plants is shown below.

```
   lstrf shade
1     13     O
6     11     O
9     14     O
10    23     O
18    16     O
```

g. **[1 pt]** The data for each completely shaded plot with less than five plants is shown below.

```
   lstrf shade
2      2     S
3      1     S
4      0     S
11     0     S
12     2     S
17     4     S
19     1     S
```

Appendix R Commands

```
> library(NCStats)
> setwd('C:/aaaWork/Books/Intro_Stats_Integrated/HW/')
> df <- read.table("loostrife.txt",header=TRUE)
> df[10,]
> df$lstrf
> Subset(df,shade=="S")
> Subset(df,shade=="O")
> Subset(df,shade!="S")
> Subset(df,lstrf>10)
> Subset(df,shade=="S" & lstrf <5)
```

Notes from the Professor

- In 2.12b, use the variable name (e.g., `df$lstrf`) rather than the column position (e.g., `df[,1]`).
- Don't use `view()` when you want to see an entire data frame because it only shows a random six rows. Type the name of the data frame object if you want to see the entire data frame.
- You should have no R code in the "answers" part of your document. Your R code should appear, without any command prompts or additional labeling, as an appendix at the end of your document. You or I should be able to copy all of the code in your appendix into R and have it run without error (with the possible exception that I would have to change your working directory in `setwd()`).
- Make sure you follow the directions for formatting your homework found in Section 2.5 of the book.
- On the next homework, make sure that tables and figures are labelled and referred to as described in Section 2.5 of the book.