

sample computer assignments

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2022-09-18

```
knitr::opts_chunk$set(echo = TRUE)
```

```
flow=read.table("ex01-14.txt", header=T)
```

Exercise 1:

(Parts a-c were done on my laptop...)

(d)

```
stem(flow$Rate)
```

```
##
##  The decimal point is at the |
##
##   2 | 23
##   3 | 2344567789
##   4 | 01356889
##   5 | 00001114455666789
##   6 | 0000122223344456667789999
##   7 | 00012233455555668
##   8 | 02233448
##   9 | 012233335666788
##  10 | 2344455688
##  11 | 2335999
##  12 | 37
##  13 | 8
##  14 | 36
##  15 | 0035
##  16 |
##  17 |
##  18 | 9
```

(e) The distribution appears skewed right.

(f) The data value 18.9 appears to be an outlier.

(g) the mean and standard deviation are respectively

```
mean(flow$Rate)
```

```
## [1] 7.707752
```

```
sd(flow$Rate)
```

```
## [1] 3.076844
```

(h) The first and third quartiles are respectively

```
quantile(flow$Rate,.25)
```

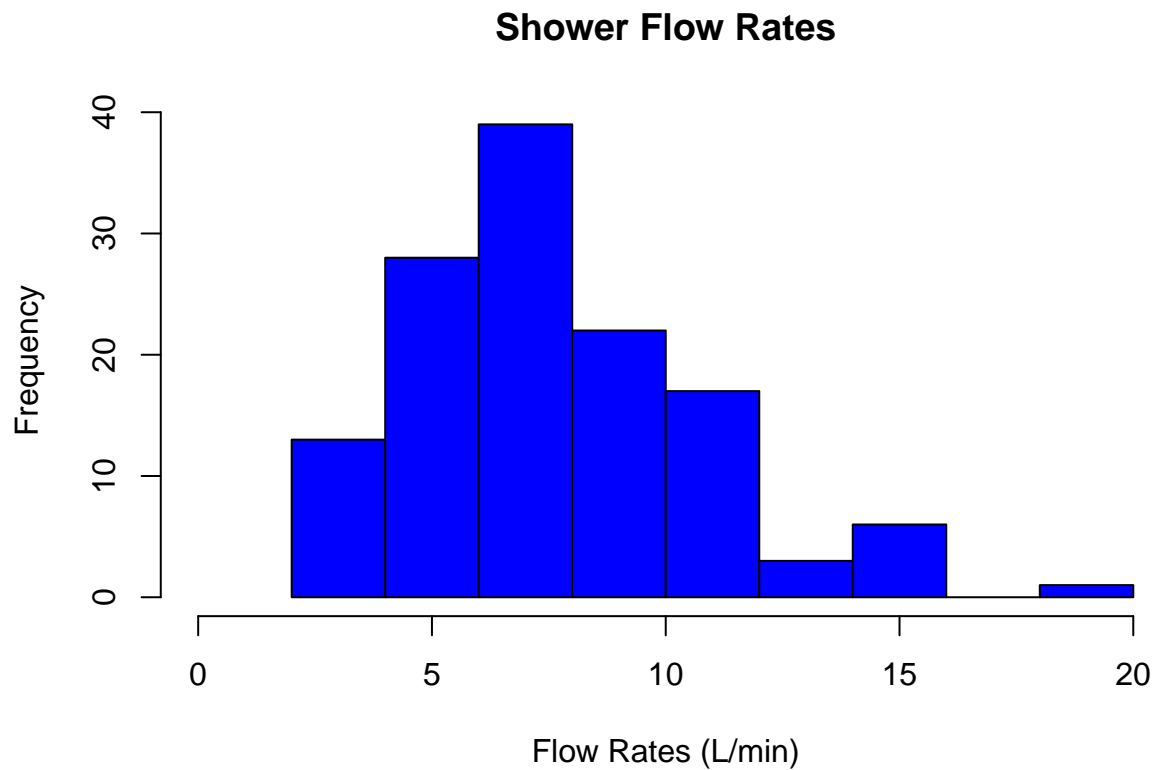
```
## 25%  
## 5.6
```

```
quantile(flow$Rate, .75)
```

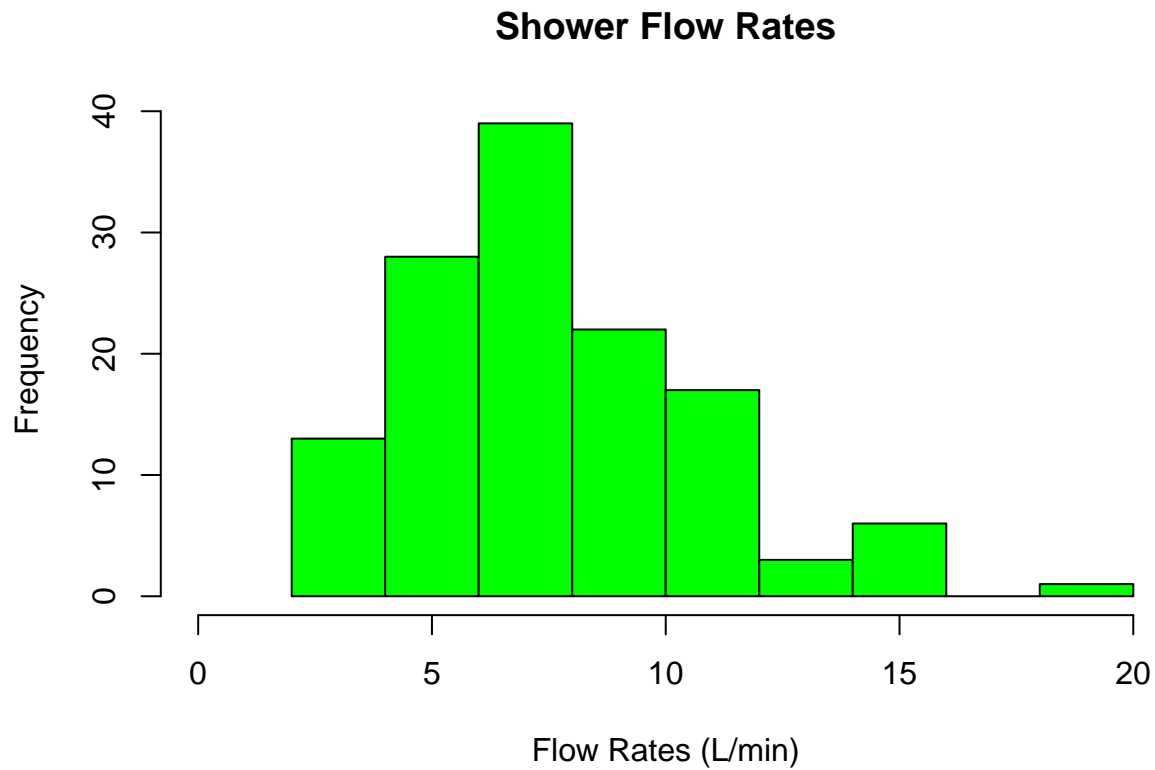
```
## 75%  
## 9.6
```

(i) Several histograms

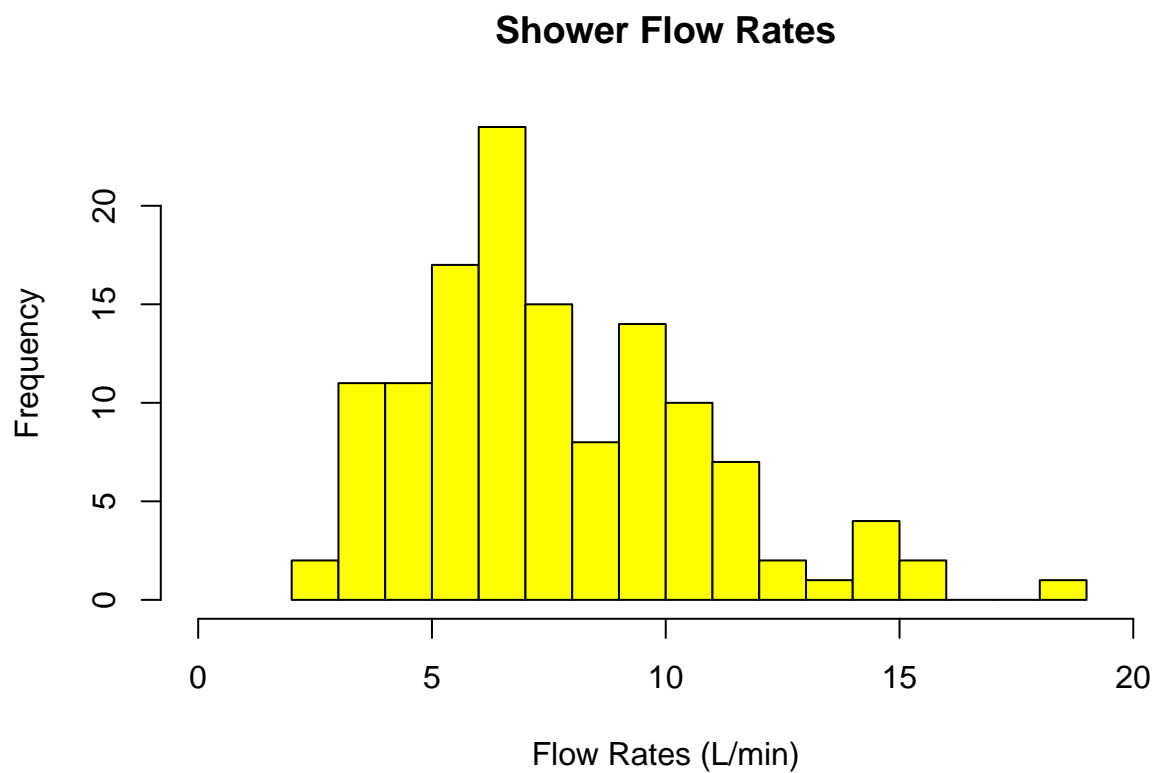
```
hist(flow$Rate,main="Shower Flow Rates",xlab="Flow Rates (L/min)",xlim=c(0,20),col="Blue")
```



```
hist(flow$Rate,main="Shower Flow Rates",xlab="Flow Rates (L/min)",xlim=c(0,20),col="Green",breaks=10)
```



```
hist(flow$Rate,main="Shower Flow Rates",xlab="Flow Rates (L/min)",xlim=c(0,20),col="Yellow",breaks=20)
```



All of the shapes appear to be skewed right.

Exercise 2:

Exercise 2 (and all remaining exercises) should start on a new page...the code is `\newpage`

Note: Make sure you clearly label each part...i.e. (a), (b), etc.

Make sure to answer all questions.

Remember, your instructor has to read it. So having some space between your answers and labeling every question part (a, b, c, etc.) helps.