## #R Example 1

> #R is case sensitive!

> Y <- 20

> Y [1] 20

```
#Create a data vector using c()
# = and <- are "assignment operators"
y = c(1, 2, 3, 4)
У
mean(y)
#R is case sensitive!
Y < -20
Υ
#Loading a "built-in" data set
#Use str() or View() to look at the data
data(chickwts)
str(chickwts)
View(chickwts)
summary(chickwts)
#Summary Statistics
#Approaches to referencing a single column in a data.frame
#1 $ Approach
mean(chickwts$weight)
#2 with() function
with(mean(weight), data = chickwts)
#3 data = option (not available with all functions!)
aggregate(weight ~ feed, data = chickwts, FUN = mean)
#4 attach(): Use with caution!
mean(weight)
attach(chickwts)
mean(weight)
detach(chickwts)
#Summary Graphics
boxplot(weight ~ feed, data = chickwts, col = "grey")
> #Create a data vector using c()
> # = and <- are "assignment operators"
> y = c(1, 2, 3, 4)
> y
[1] 1 2 3 4
> mean(y)
[1] 2.5
```

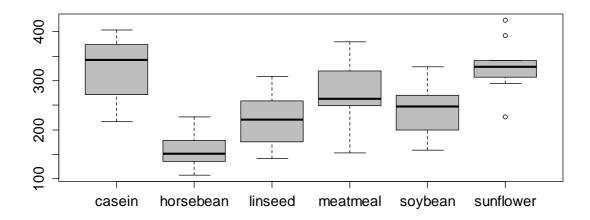
R Example #1 1

```
> #Loading a "built-in" data set
> #Use str() or View() to look at the data
> data(chickwts)
> str(chickwts)
                   71 obs. of 2 variables:
'data.frame':
 $ weight: num 179 160 136 227 217 168 108 124 143 140 ...
 $ feed : Factor w/ 6 levels "casein", "horsebean", ..: 2 2 2 ...
> View(chickwts)
> summary(chickwts)
     weight
                        feed
Min.
       :108.0
                casein
                         :12
1st Qu.:204.5
                horsebean:10
Median :258.0 linseed :12
      :261.3 meatmeal :11
Mean
 3rd Qu.:323.5
               soybean :14
Max. :423.0 sunflower:12
> #Summary Statistics
> #Approaches to referencing a single column in a data.frame
> #1 $ Approach
> mean(chickwts$weight)
[1] 261.3099
> #2 with() function
> with(mean(weight), data = chickwts)
[1] 261.3099
> #3 data = option (not available with all functions!)
> aggregate(weight ~ feed, data = chickwts, FUN = mean)
       feed
             weight
     casein 323.5833
2 horsebean 160.2000
   linseed 218.7500
 meatmeal 276.9091
4
  soybean 246.4286
6 sunflower 328.9167
> #4 attach(): Use with caution!
> mean(weight)
Error in mean(weight) : object 'weight' not found
> attach(chickwts)
> mean(weight)
[1] 261.3099
> detach(chickwts)
>
```

R Example #1 2

## > #Summary Graphics

> boxplot(weight ~ feed, data = chickwts, col = "grey")



R Example #1 3