Module 1 Assignment 3

Ellen Bledsoe

2024-09-24

```
1.
## [1] NA
  2.
## [1] 64.94737
  3.
    [1] 63 60 65 NA 61 61 59 64 63 63 65 64 63 65
  4.
## [1] "Mystery" "Hazel"
                             "Spud"
                                       "Pancho"
  5.
## [1] "Spud"
  6.
## [1] "Spud"
  8.
     group_id paddle_id length_in width_in depth_in spines insects damage location
## 1
             1
                       1
                               7.25
                                        2.50
                                                  0.25
                                                            N
                                                                         None
                                                                                  Eigth
## 2
             1
                       2
                              7.50
                                        2.25
                                                  0.25
                                                            N
                                                                     N
                                                                         None
                                                                                Seventh
## 3
             1
                       3
                              9.25
                                        4.00
                                                  0.50
                                                            N
                                                                     Υ
                                                                         None
                                                                                  Sixth
                                        3.50
## 4
             1
                       4
                               9.50
                                                  0.25
                                                            N
                                                                     N
                                                                         None
                                                                                  Fifth
## 5
             1
                       5
                               8.00
                                        5.50
                                                  0.50
                                                            N
                                                                     N
                                                                         Some
                                                                                 Fourth
                       6
## 6
             1
                               4.50
                                        1.75
                                                  0.25
                                                                         None
                                                                                  Fifth
##
                   species
                              size
## 1 Opuntia ficus-indica Medium
## 2 Opuntia ficus-indica Medium
## 3 Opuntia ficus-indica Medium
## 4 Opuntia ficus-indica Medium
## 5 Opuntia ficus-indica Medium
## 6 Opuntia ficus-indica Medium
```

9.

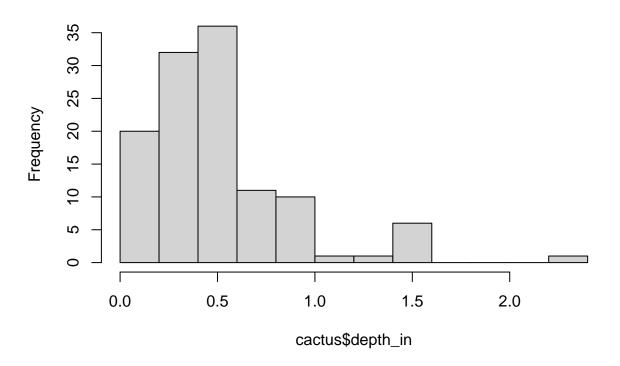
[1] 9.123729

10.

[1] 9.1

11.

Histogram of cactus\$depth_in



13.

```
"Seventh"
                                 "Sixth"
                                             "Fifth"
                                                         "Fourth"
##
    [1] "Eigth"
                                                                     "Fifth"
    [7]
        "Fourth"
                     "Fourth"
                                 "Fourth"
                                             "Seventh"
                                                         "Fifth"
                                                                     "Fifth"
##
                                 "Sixth"
        "Second"
                     "Fifth"
                                             "Third"
                                                         "Fourth"
   [13]
                                                                     "Third"
        "Second"
                     "Second"
                                 "Ninth"
                                             "Seventh"
                                                         "Ninth"
##
   [19]
                                                                     "Sixth"
   [25]
        "Fifth"
                     "Sixth"
                                 "Sixth"
                                             "Eigth"
                                                         "Seventh"
                                                                     "Sixth"
##
   [31]
        "Fifth"
                     "Fourth"
                                 "Fourth"
                                             "Fifth"
                                                         "Seventh"
                                                                     "Sixth"
##
        "Eigth"
                                 "Seventh"
                                             "Fourth"
                                                         "Sixth"
                                                                     "Ninth"
   [37]
                     "Ninth"
        "Eleventh"
   [43]
                     "Tenth"
                                 "Ninth"
                                             "Eigth"
                                                         "Seventh"
                                                                     "Sixth"
                                                         "Tenth"
                                                                     "Tenth"
        "Second"
                     "Third"
                                 "First"
                                             "Eleventh"
   [49]
        "Tenth"
                                                         "Eigth"
   [55]
                     "Tenth"
                                 "Ninth"
                                             "Ninth"
                                                                     "Seventh"
## [61] "Sixth"
```

14. Just a note that I am printing the first 10 rows of each data frame, not necessarily the entire thing, to include in the answer key.

```
##
      group_id paddle_id length_in width_in depth_in spines insects damage
## 1
                                7.25
                                          2.50
                                                    0.25
                                                               N
                                                                        N
                                                                            None
              1
                         1
## 2
                         2
                                7.50
                                          2.25
                                                    0.25
                                                               N
              1
                                                                        N
                                                                            None
## 3
                         3
                                9.25
                                          4.00
                                                    0.50
                                                               N
                                                                        Y
                                                                            None
              1
## 4
              1
                         4
                                9.50
                                          3.50
                                                    0.25
                                                               N
                                                                        N
                                                                            None
## 5
              1
                         5
                                8.00
                                          5.50
                                                    0.50
                                                               N
                                                                        N
                                                                            Some
## 6
              1
                         6
                                4.50
                                          1.75
                                                    0.25
                                                               N
                                                                            None
                         7
## 7
                                9.25
                                          4.50
                                                    0.25
                                                                            Some
              1
                                                               N
                                                                        N
## 8
              1
                         8
                                7.50
                                          3.50
                                                    0.50
                                                               N
                                                                        N
                                                                            Some
## 9
                         9
                                6.00
                                          2.50
                                                    0.25
                                                               N
                                                                        N
                                                                            None
              1
## 10
              1
                        10
                                7.00
                                          3.00
                                                    0.25
                                                               N
                                                                            None
##
      location
                              species
                                         size
## 1
         Eigth Opuntia ficus-indica Medium
## 2
       Seventh Opuntia ficus-indica Medium
## 3
         Sixth Opuntia ficus-indica Medium
## 4
         Fifth Opuntia ficus-indica Medium
## 5
        Fourth Opuntia ficus-indica Medium
## 6
         Fifth Opuntia ficus-indica Medium
## 7
        Fourth Opuntia ficus-indica Medium
        Fourth Opuntia ficus-indica Medium
## 8
## 9
        Fourth Opuntia ficus-indica Medium
       Seventh Opuntia ficus-indica Medium
##
      group_id paddle_id length_in width_in depth_in spines insects damage
## 11
                                                     1.0
                                                               Y
                                                                            Most
                         1
                                10.0
                                          10.5
## 12
                         2
              2
                                10.5
                                           9.0
                                                     1.5
                                                               Y
                                                                        N
                                                                            Most
## 13
              2
                         3
                                13.5
                                           6.5
                                                     0.5
                                                               Y
                                                                        N
                                                                            None
## 14
              2
                         4
                                10.0
                                          10.5
                                                     1.5
                                                               Y
                                                                            Most
                                                                        N
## 15
              2
                         5
                                16.0
                                           5.5
                                                     0.5
                                                               Y
                                                                        N
                                                                            None
                                                                            Some
## 16
              2
                         6
                                10.0
                                           7.5
                                                     0.5
                                                               Y
                                                                        Y
                         7
## 17
              2
                                11.0
                                           7.5
                                                     0.5
                                                               Y
                                                                             All
                                                               Y
## 18
              2
                         8
                                12.0
                                           8.0
                                                     0.5
                                                                        Y
                                                                            Some
##
  19
              2
                         9
                                11.0
                                           7.5
                                                     0.5
                                                               Y
                                                                        Y
                                                                            Some
  20
                                                               Y
##
              2
                        10
                                11.0
                                           9.0
                                                     0.5
                                                                            Some
##
      location
                             species
                                        size
         First Opuntia engelmannii Medium
## 11
## 12
        Second Opuntia engelmannii Medium
## 13
         Third Opuntia engelmannii Medium
        Fourth Opuntia engelmannii Medium
## 14
## 15
         Fifth Opuntia engelmannii Medium
## 16
         Sixth Opuntia engelmannii Medium
## 17
        Fourth Opuntia engelmannii Medium
         Fifth Opuntia engelmannii Medium
## 18
## 19
         Sixth Opuntia engelmannii Medium
## 20
         Sixth Opuntia engelmannii Medium
 15.
## [1] 4.411207
```

16.

[1] 8.32875

- ## [1] 1.528388
- ## [1] 2.12681