Module 1 Assignment 3

Ellen Bledsoe

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```
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.
                                                             size paddle_id length_in
     group_id temp_F wind_speed_mph
                                                  species
## 1
            2
                  59
                                    4 Opuntia engelmannii Medium
                                                                           1
                                                                                  13.0
## 2
            2
                   59
                                    4 Opuntia engelmannii Medium
                                                                           2
                                                                                  12.2
## 3
            2
                   59
                                    4 Opuntia engelmannii Medium
                                                                           3
                                                                                  10.3
            2
## 4
                   59
                                    4 Opuntia engelmannii Medium
                                                                           4
                                                                                  10.0
## 5
            2
                   59
                                    4 Opuntia engelmannii Medium
                                                                           5
                                                                                  12.7
                   59
## 6
                                    4 Opuntia engelmannii Medium
                                                                                  13.8
##
     width_in depth_in spines insects damage location
         10.0
                    0.5
                                                  Fifth
## 1
                             Y
                                          None
                    0.4
                             Y
                                                 Fourth
## 2
          6.0
                                      N
                                          Some
## 3
                             Y
          7.5
                    0.2
                                      N
                                          None
                                                 Fourth
                             Y
## 4
          6.8
                    0.1
                                          None
                                                 Fourth
## 5
         10.1
                    0.2
                             Y
                                          None
                                                  Fifth
## 6
          9.5
                    0.5
                             Y
                                                 Fourth
                                      N
                                          Most
```

9.

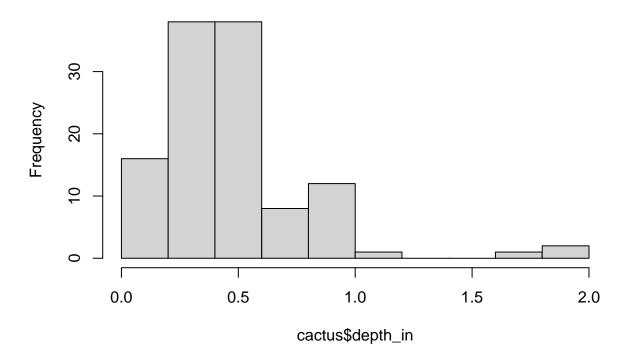
[1] 9.509483

10.

[1] 9.5

11.

Histogram of cactus\$depth_in



13.

```
## [1] 0.50 0.20 0.10 0.40 0.30 0.40 0.50 0.30 0.35 0.25 0.25 0.50 0.50 0.50 0.50 ## [16] 0.50 0.25 0.50 0.50 0.50 0.50 0.20 0.30 0.60 0.20 0.30 0.30 0.20 0.30 0.20 0.40 ## [31] 0.50 0.50 0.40 0.50 0.60 0.70 1.00 0.60 1.70 0.40 0.50 0.50 0.40 0.50 0.75 ## [46] 0.25 0.50 0.40 0.40 0.30 0.50 0.30 0.40 0.30 0.80 0.40 0.30
```

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 temp_F wind_speed_mph species size paddle_id
## 11 9 59 4 Opuntia ficus-indica Medium 1
## 12 9 59 4 Opuntia ficus-indica Medium 2
```

```
## 13
              9
                     59
                                      4 Opuntia ficus-indica Medium
                                                                                3
## 14
              9
                     59
                                      4 Opuntia ficus-indica Medium
                                                                                4
## 15
              9
                     59
                                      4 Opuntia ficus-indica Medium
                                                                                5
## 16
              9
                                                                                6
                     59
                                      4 Opuntia ficus-indica Medium
                                                                                7
## 17
              9
                     59
                                      4 Opuntia ficus-indica Medium
## 18
              9
                     59
                                      4 Opuntia ficus-indica Medium
                                                                                8
## 19
              9
                     59
                                      4 Opuntia ficus-indica Medium
                                                                                9
## 20
              9
                                      4 Opuntia ficus-indica Medium
                     59
                                                                               10
      length_in width_in depth_in spines insects damage location
## 11
                       4.5
                                                        Some
             8.5
                                 0.5
                                           N
                                                    N
                                                              Seventh
##
  12
             6.0
                       2.7
                                 0.2
                                           N
                                                    N
                                                        None
                                                                 Sixth
## 13
             1.2
                                           N
                       0.5
                                 0.1
                                                    N
                                                        None
                                                                 Eigth
## 14
             9.0
                       2.2
                                 0.4
                                           N
                                                    N
                                                        Some
                                                                Fourth
## 15
             5.6
                       2.7
                                 0.3
                                           N
                                                    N
                                                        None
                                                                 Sixth
## 16
             4.5
                       1.8
                                 0.4
                                           N
                                                    N
                                                        None
                                                                 Sixth
## 17
             9.5
                       5.0
                                 0.5
                                           N
                                                    N
                                                        Most
                                                                Second
## 18
             5.7
                       1.5
                                 0.3
                                           N
                                                   N
                                                                 Sixth
                                                        None
## 19
             4.8
                       2.5
                                 0.1
                                           Y
                                                        None
                                                               Seventh
## 20
             4.8
                       2.3
                                 0.3
                                           N
                                                   N
                                                              Seventh
                                                        None
##
      group_id temp_F wind_speed_mph
                                                      species
                                                                 size paddle_id
## 1
              2
                     59
                                      4 Opuntia engelmannii Medium
## 2
              2
                     59
                                      4 Opuntia engelmannii Medium
                                                                               2
## 3
              2
                     59
                                      4 Opuntia engelmannii Medium
                                                                               3
## 4
              2
                     59
                                                                               4
                                      4 Opuntia engelmannii Medium
## 5
                     59
                                      4 Opuntia engelmannii Medium
                                                                               5
## 6
              2
                     59
                                      4 Opuntia engelmannii Medium
                                                                               6
## 7
              2
                     59
                                      4 Opuntia engelmannii Medium
                                                                               7
## 8
              2
                     59
                                      4 Opuntia engelmannii Medium
                                                                               8
## 9
              2
                     59
                                      4 Opuntia engelmannii Medium
                                                                               9
## 10
              2
                                      4 Opuntia engelmannii Medium
                     59
                                                                              10
##
      length_in width_in depth_in spines insects damage location
## 1
            13.0
                      10.0
                                 0.5
                                           Y
                                                        None
                                                                 Fifth
                                                   N
## 2
            12.2
                       6.0
                                 0.4
                                           Y
                                                    N
                                                        Some
                                                                Fourth
## 3
                       7.5
                                           Y
            10.3
                                 0.2
                                                        None
                                                   N
                                                                Fourth
## 4
            10.0
                       6.8
                                 0.1
                                           Y
                                                   N
                                                        None
                                                                Fourth
## 5
            12.7
                      10.1
                                 0.2
                                           Y
                                                    N
                                                        None
                                                                 Fifth
## 6
            13.8
                       9.5
                                 0.5
                                           Y
                                                    N
                                                        Most
                                                                Fourth
## 7
                       9.0
                                           Y
            13.5
                                 0.4
                                                    N
                                                        None
                                                                Fourth
## 8
            10.4
                       7.6
                                 0.4
                                           Y
                                                   N
                                                        None
                                                                 Fifth
## 9
             9.0
                       6.2
                                 0.3
                                           Y
                                                    N
                                                        None
                                                                 Fifth
## 10
                                           Y
            11.0
                       6.8
                                 0.3
                                                   N
                                                        None
                                                                 Fifth
```

15.

[1] 5.2775

[1] 8.197222

16.

[1] 2.402178

[1] 1.818906