R version 4.3.1 (2023-06-16 ucrt) -- "Beagle Scouts"

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Platform: x86\_64-w64-mingw32/x64 (64-bit)

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'help.start()' for an HTML browser interface to help.

Type 'q()' to quit R.

[Workspace loaded from ~/.RData]

> library(readxl)

> Typical\_Employee\_Survey\_Data <- read\_excel("C:/Users/surya/Downloads/Typical\_Employee\_Survey\_Data.xlsx",

+ col\_names = FALSE)

New names:

• `` -> `...1`

• `` -> `...2`

• `` -> `...3`

• `` -> `...4`

• `` -> `...5`

• `` -> `...6`

• `` -> `...7`

• `` -> `...8`

• `` -> `...9`

• `` -> `...10`

• `` -> `...11`

> View(Typical\_Employee\_Survey\_Data)

> mydataframe <- data.frame(Typical\_Employee\_Survey\_Data)

> names(mydataframe) <- c("Q1","Q2","Q3","Q4","Q5","Q6","Q7","Q8","Q9","Q10","Q11")

> data.frame(Typical\_Employee\_Survey\_Data)

...1 ...2 ...3 ...4 ...5 ...6 ...7 ...8 ...9 ...10 ...11

1 35 1 2 4 3.00 1 2 1 2 5 2

2 33 1 2 3 9.00 5 2 1 2 2 1

3 23 1 1 1 1.50 1 2 2 1 5 2

4 60 1 1 1 20.00 3 2 2 1 1 1

5 35 1 2 1 3.00 3 2 1 2 4 2

6 34 2 2 1 6.00 1 2 2 2 4 4

7 61 2 1 1 0.75 5 3 2 2 4 1

8 59 1 2 5 1.50 2 1 2 2 4 1

9 37 2 1 5 3.00 4 3 1 2 2 3

10 30 1 1 5 5.00 2 2 1 1 2 2

11 34 2 1 3 3.00 4 2 1 1 4 2

12 34 2 2 3 8.00 2 2 1 2 2 2

13 27 2 2 5 7.00 2 3 2 2 4 2

14 38 1 1 4 15.00 1 2 1 2 2 1

15 41 1 3 1 1.00 4 2 2 4 5 3

16 58 1 2 4 36.00 5 2 1 2 5 2

17 34 2 2 1 1.50 2 3 2 2 2 2

18 48 2 2 5 6.00 4 2 2 2 4 2

19 26 2 1 4 3.50 3 2 1 1 2 1

20 39 1 1 5 3.00 5 3 1 1 1 1

21 29 2 1 5 16.00 1 1 1 2 2 3

22 36 1 4 5 4.08 4 2 2 3 4 3

23 25 1 1 4 2.00 1 3 2 2 4 2

24 39 2 2 5 2.00 1 2 2 2 4 3

25 40 1 2 1 11.83 1 2 1 2 4 2

26 53 1 2 1 10.00 2 2 1 2 4 1

27 39 2 1 5 1.00 5 3 1 1 1 1

28 27 2 4 2 2.00 5 1 2 2 4 3

29 35 1 1 1 10.00 5 1 2 2 4 3

30 25 1 1 5 2.50 5 2 1 1 2 1

31 29 1 2 5 1.00 1 1 1 3 4 2

32 23 2 1 2 0.75 1 3 1 1 1 1

33 40 1 1 5 4.33 1 3 1 3 4 2

34 36 2 3 1 10.00 2 2 2 2 3 1

35 64 2 1 4 7.00 5 2 1 1 1 2

36 43 2 1 5 18.00 5 2 1 2 2 1

37 28 2 2 5 0.16 2 3 2 2 5 2

38 48 2 1 5 1.66 5 3 2 1 2 3

39 52 1 3 5 0.08 5 3 2 2 4 1

40 32 1 2 1 3.00 2 1 2 2 2 2

41 23 1 2 1 1.00 1 2 2 3 4 1

42 44 2 1 1 5.00 2 2 2 2 4 1

43 36 2 4 1 9.50 4 3 1 3 5 4

44 33 2 2 3 3.75 2 2 2 2 4 2

45 52 1 1 5 1.00 5 1 1 2 2 1

46 38 1 1 5 2.66 5 3 1 1 1 1

47 34 1 1 5 5.50 4 2 1 1 1 2

48 62 1 1 1 52.25 4 2 1 2 2 1

49 36 2 4 5 1.00 1 3 2 2 5 2

50 37 1 2 5 19.00 1 2 1 3 4 2

51 39 2 2 5 10.00 4 2 1 1 4 2

52 61 2 1 5 13.00 4 2 2 1 1 2

53 20 1 2 4 3.00 2 3 1 3 2 1

54 22 1 2 5 1.00 3 3 1 2 5 2

55 36 1 1 5 7.00 2 2 1 2 4 1

56 48 2 1 4 4.00 1 3 2 1 4 1

57 58 2 1 4 12.00 4 3 2 2 4 2

58 50 1 3 5 22.50 4 3 2 2 4 2

59 24 1 2 5 1.00 2 2 2 2 4 1

60 44 2 1 1 10.00 4 1 2 1 1 1

61 30 2 4 5 2.00 4 3 2 2 4 2

62 32 1 2 5 7.00 2 3 2 2 2 1

63 32 1 2 1 12.00 5 2 1 1 2 3

64 44 1 1 4 22.00 2 2 1 2 4 1

65 34 1 1 5 4.00 2 2 1 2 2 1

66 42 2 2 5 22.00 2 2 1 2 4 2

67 40 1 1 5 2.00 2 1 1 1 1 2

68 37 1 1 5 5.00 1 1 2 2 4 1

69 32 2 2 5 11.00 4 4 1 2 5 2

70 31 2 1 1 10.00 1 2 1 2 2 3

71 44 1 1 4 0.66 5 3 1 1 5 1

72 39 1 1 5 11.00 4 2 1 1 2 1

73 30 1 2 1 11.00 5 2 2 2 4 1

74 41 1 2 4 12.00 3 3 2 2 4 1

75 39 1 3 4 9.00 4 3 2 2 5 1

76 33 1 2 5 10.00 5 1 1 1 4 1

77 25 1 2 4 3.00 5 1 1 2 5 2

78 31 2 1 5 5.50 5 3 2 2 4 1

79 41 2 1 5 2.33 2 2 2 1 4 3

80 42 1 1 2 5.00 4 3 1 2 5 2

81 33 2 2 5 1.00 4 3 2 2 5 3

82 36 2 1 5 6.00 5 2 1 1 2 1

83 39 1 2 4 16.00 2 2 2 2 4 2

84 39 1 1 1 3.25 5 3 1 1 1 1

85 62 1 1 2 27.00 5 2 1 2 2 1

86 62 1 1 1 1.91 2 1 2 2 4 3

87 34 1 1 4 2.08 2 3 1 1 4 1

88 52 1 1 2 31.91 2 4 1 1 2 2

89 40 1 3 5 6.00 5 3 2 2 4 3

90 43 2 2 5 14.00 5 2 1 2 4 1

[ reached 'max' / getOption("max.print") -- omitted 32 rows ]

> summary(mydataframe)

Q1 Q2 Q3 Q4

Min. :20.0 Min. :1.000 Min. :1.000 Min. :1.000

1st Qu.:33.0 1st Qu.:1.000 1st Qu.:1.000 1st Qu.:2.000

Median :38.0 Median :1.000 Median :1.000 Median :5.000

Mean :39.1 Mean :1.426 Mean :1.631 Mean :3.705

3rd Qu.:44.0 3rd Qu.:2.000 3rd Qu.:2.000 3rd Qu.:5.000

Max. :64.0 Max. :2.000 Max. :4.000 Max. :5.000

Q5 Q6 Q7 Q8

Min. : 0.080 Min. :1.000 Min. :1.000 Min. :1.000

1st Qu.: 2.000 1st Qu.:2.000 1st Qu.:2.000 1st Qu.:1.000

Median : 5.000 Median :4.000 Median :2.000 Median :1.000

Mean : 8.224 Mean :3.287 Mean :2.279 Mean :1.451

3rd Qu.:11.000 3rd Qu.:5.000 3rd Qu.:3.000 3rd Qu.:2.000

Max. :52.250 Max. :5.000 Max. :4.000 Max. :2.000

Q9 Q10 Q11

Min. :1.000 Min. :1.000 Min. :1.000

1st Qu.:1.000 1st Qu.:2.000 1st Qu.:1.000

Median :2.000 Median :4.000 Median :2.000

Mean :1.787 Mean :3.254 Mean :1.787

3rd Qu.:2.000 3rd Qu.:4.000 3rd Qu.:2.000

Max. :4.000 Max. :5.000 Max. :4.000

> boxplot(mydataframe$Q1)

> boxplot(mydataframe$Q2)

> boxplot(mydataframe$Q3)

> boxplot(mydataframe$Q4)

> boxplot(mydataframe$Q5)

> boxplot(mydataframe$Q6)

> boxplot(mydataframe$Q7)

> boxplot(mydataframe$Q8)

> boxplot(mydataframe$Q9)

> boxplot(mydataframe$Q10)

> boxplot(mydataframe$Q11)

> mydataframe$Q2 <- as.factor(mydataframe$Q2)

> mydataframe$Q3 <- as.factor(mydataframe$Q3)

> mydataframe$Q4 <- as.factor(mydataframe$Q4)

> mydataframe$Q6 <- as.factor(mydataframe$Q6)

> mydataframe$Q7 <- as.factor(mydataframe$Q7)

> mydataframe$Q8 <- as.factor(mydataframe$Q8)

> mydataframe$Q9 <- as.factor(mydataframe$Q9)

> mydataframe$Q10 <- as.factor(mydataframe$Q10)

> mydataframe$Q11 <- as.factor(mydataframe$Q11)

> names(mydataframe) <- c("Q1","Q2","Q3","Q4","Q5","Q6","Q7","Q8","Q9","Q10","Q11")

> barplot(mydataframe$Q1)

> hist(mydataframe$Q1)

> hist(mydataframe$Q1,main = "Age - as of last birthday",xlab = "Age",ylab = "Number of People",col = "Blue")

> pie(mydataframe$Q2,labels = mydataframe$Q2,main = "Gender")

Error in pie(mydataframe$Q2, labels = mydataframe$Q2, main = "Gender") :

'x' values must be positive.

> pie(mydataframe$Q2,labels = mydataframe$Q2,main = "Gender")

Error in pie(mydataframe$Q2, labels = mydataframe$Q2, main = "Gender") :

'x' values must be positive.

> barplot(mydataframe$Q2)

Error in barplot.default(mydataframe$Q2) :

'height' must be a vector or a matrix

> pie(mydataframe$Q2)

Error in pie(mydataframe$Q2) : 'x' values must be positive.

> pie?

+ barplot(?)

Error: unexpected ')' in:

"pie?

barplot(?)"

> pie(mydataframe$Q8)

Error in pie(mydataframe$Q8) : 'x' values must be positive.

> pie(mydataframe$Q3)

Error in pie(mydataframe$Q3) : 'x' values must be positive.

> pie(mydataframe$Q3)

Error in pie(mydataframe$Q3) : 'x' values must be positive.

> hist(mydataframe$Q5)

> hist(mydataframe$Q5,main = "Years of service for current employer",xlab = "Number of years",ylab = "Number of people",col = "Green")

> pie(mydataframe$Q4)

Error in pie(mydataframe$Q4) : 'x' values must be positive.

> scatter.smooth(mydataframe$Q2,mydataframe$Q3)

There were 20 warnings (use warnings() to see them)

> boxplot.stats(mydataframe$Q2)$Q3

NULL

Warning message:

In Ops.factor(x[floor(d)], x[ceiling(d)]) : ‘+’ not meaningful for factors

> boxplot.stats(mydataframe$Q2)

$stats

[1] NA NA NA NA NA

$n

[1] 122

$conf

[1] NA NA

$out

factor()

Levels: 1 2

Warning message:

In Ops.factor(x[floor(d)], x[ceiling(d)]) : ‘+’ not meaningful for factors

> stem(mydataframe$Q2)

Error in stem(mydataframe$Q2) : 'x' must be numeric

> ---

+ title: "Homework"

Error in -title : invalid argument to unary operator

> ## R Markdown

> pie(mydataframe$Q6)

Error in pie(mydataframe$Q6) : 'x' values must be positive.

> str(mydataframe$Q2)

Factor w/ 2 levels "1","2": 1 1 1 1 1 2 2 1 2 1 ...

> str(mydataframe)

'data.frame': 122 obs. of 11 variables:

$ Q1 : num 35 33 23 60 35 34 61 59 37 30 ...

$ Q2 : Factor w/ 2 levels "1","2": 1 1 1 1 1 2 2 1 2 1 ...

$ Q3 : Factor w/ 4 levels "1","2","3","4": 2 2 1 1 2 2 1 2 1 1 ...

$ Q4 : Factor w/ 5 levels "1","2","3","4",..: 4 3 1 1 1 1 1 5 5 5 ...

$ Q5 : num 3 9 1.5 20 3 6 0.75 1.5 3 5 ...

$ Q6 : Factor w/ 5 levels "1","2","3","4",..: 1 5 1 3 3 1 5 2 4 2 ...

$ Q7 : Factor w/ 4 levels "1","2","3","4": 2 2 2 2 2 2 3 1 3 2 ...

$ Q8 : Factor w/ 2 levels "1","2": 1 1 2 2 1 2 2 2 1 1 ...

$ Q9 : Factor w/ 4 levels "1","2","3","4": 2 2 1 1 2 2 2 2 2 1 ...

$ Q10: Factor w/ 5 levels "1","2","3","4",..: 5 2 5 1 4 4 4 4 2 2 ...

$ Q11: Factor w/ 4 levels "1","2","3","4": 2 1 2 1 2 4 1 1 3 2 ...

> pie(mydataframe$Q2)

Error in pie(mydataframe$Q2) : 'x' values must be positive.

> barplot(mydataframe$Q2)

Error in barplot.default(mydataframe$Q2) :

'height' must be a vector or a matrix

> mydataframe

Q1 Q2 Q3 Q4 Q5 Q6 Q7 Q8 Q9 Q10 Q11

1 35 1 2 4 3.00 1 2 1 2 5 2

2 33 1 2 3 9.00 5 2 1 2 2 1

3 23 1 1 1 1.50 1 2 2 1 5 2

4 60 1 1 1 20.00 3 2 2 1 1 1

5 35 1 2 1 3.00 3 2 1 2 4 2

6 34 2 2 1 6.00 1 2 2 2 4 4

7 61 2 1 1 0.75 5 3 2 2 4 1

8 59 1 2 5 1.50 2 1 2 2 4 1

9 37 2 1 5 3.00 4 3 1 2 2 3

10 30 1 1 5 5.00 2 2 1 1 2 2

11 34 2 1 3 3.00 4 2 1 1 4 2

12 34 2 2 3 8.00 2 2 1 2 2 2

13 27 2 2 5 7.00 2 3 2 2 4 2

14 38 1 1 4 15.00 1 2 1 2 2 1

15 41 1 3 1 1.00 4 2 2 4 5 3

16 58 1 2 4 36.00 5 2 1 2 5 2

17 34 2 2 1 1.50 2 3 2 2 2 2

18 48 2 2 5 6.00 4 2 2 2 4 2

19 26 2 1 4 3.50 3 2 1 1 2 1

20 39 1 1 5 3.00 5 3 1 1 1 1

21 29 2 1 5 16.00 1 1 1 2 2 3

22 36 1 4 5 4.08 4 2 2 3 4 3

23 25 1 1 4 2.00 1 3 2 2 4 2

24 39 2 2 5 2.00 1 2 2 2 4 3

25 40 1 2 1 11.83 1 2 1 2 4 2

26 53 1 2 1 10.00 2 2 1 2 4 1

27 39 2 1 5 1.00 5 3 1 1 1 1

28 27 2 4 2 2.00 5 1 2 2 4 3

29 35 1 1 1 10.00 5 1 2 2 4 3

30 25 1 1 5 2.50 5 2 1 1 2 1

31 29 1 2 5 1.00 1 1 1 3 4 2

32 23 2 1 2 0.75 1 3 1 1 1 1

33 40 1 1 5 4.33 1 3 1 3 4 2

34 36 2 3 1 10.00 2 2 2 2 3 1

35 64 2 1 4 7.00 5 2 1 1 1 2

36 43 2 1 5 18.00 5 2 1 2 2 1

37 28 2 2 5 0.16 2 3 2 2 5 2

38 48 2 1 5 1.66 5 3 2 1 2 3

39 52 1 3 5 0.08 5 3 2 2 4 1

40 32 1 2 1 3.00 2 1 2 2 2 2

41 23 1 2 1 1.00 1 2 2 3 4 1

42 44 2 1 1 5.00 2 2 2 2 4 1

43 36 2 4 1 9.50 4 3 1 3 5 4

44 33 2 2 3 3.75 2 2 2 2 4 2

45 52 1 1 5 1.00 5 1 1 2 2 1

46 38 1 1 5 2.66 5 3 1 1 1 1

47 34 1 1 5 5.50 4 2 1 1 1 2

48 62 1 1 1 52.25 4 2 1 2 2 1

49 36 2 4 5 1.00 1 3 2 2 5 2

50 37 1 2 5 19.00 1 2 1 3 4 2

51 39 2 2 5 10.00 4 2 1 1 4 2

52 61 2 1 5 13.00 4 2 2 1 1 2

53 20 1 2 4 3.00 2 3 1 3 2 1

54 22 1 2 5 1.00 3 3 1 2 5 2

55 36 1 1 5 7.00 2 2 1 2 4 1

56 48 2 1 4 4.00 1 3 2 1 4 1

57 58 2 1 4 12.00 4 3 2 2 4 2

58 50 1 3 5 22.50 4 3 2 2 4 2

59 24 1 2 5 1.00 2 2 2 2 4 1

60 44 2 1 1 10.00 4 1 2 1 1 1

61 30 2 4 5 2.00 4 3 2 2 4 2

62 32 1 2 5 7.00 2 3 2 2 2 1

63 32 1 2 1 12.00 5 2 1 1 2 3

64 44 1 1 4 22.00 2 2 1 2 4 1

65 34 1 1 5 4.00 2 2 1 2 2 1

66 42 2 2 5 22.00 2 2 1 2 4 2

67 40 1 1 5 2.00 2 1 1 1 1 2

68 37 1 1 5 5.00 1 1 2 2 4 1

69 32 2 2 5 11.00 4 4 1 2 5 2

70 31 2 1 1 10.00 1 2 1 2 2 3

71 44 1 1 4 0.66 5 3 1 1 5 1

72 39 1 1 5 11.00 4 2 1 1 2 1

73 30 1 2 1 11.00 5 2 2 2 4 1

74 41 1 2 4 12.00 3 3 2 2 4 1

75 39 1 3 4 9.00 4 3 2 2 5 1

76 33 1 2 5 10.00 5 1 1 1 4 1

77 25 1 2 4 3.00 5 1 1 2 5 2

78 31 2 1 5 5.50 5 3 2 2 4 1

79 41 2 1 5 2.33 2 2 2 1 4 3

80 42 1 1 2 5.00 4 3 1 2 5 2

81 33 2 2 5 1.00 4 3 2 2 5 3

82 36 2 1 5 6.00 5 2 1 1 2 1

83 39 1 2 4 16.00 2 2 2 2 4 2

84 39 1 1 1 3.25 5 3 1 1 1 1

85 62 1 1 2 27.00 5 2 1 2 2 1

86 62 1 1 1 1.91 2 1 2 2 4 3

87 34 1 1 4 2.08 2 3 1 1 4 1

88 52 1 1 2 31.91 2 4 1 1 2 2

89 40 1 3 5 6.00 5 3 2 2 4 3

90 43 2 2 5 14.00 5 2 1 2 4 1

[ reached 'max' / getOption("max.print") -- omitted 32 rows ]

> getOption("max.print")

[1] 1000

> pie(mydataframe)

Error in pie(mydataframe) : 'x' values must be positive.

> pie(mydataframe$Q2)

Error in pie(mydataframe$Q2) : 'x' values must be positive.

> class(mydataframe$Q2)

[1] "factor"

> mydataframe$Q2 <- as.numeric(mydataframe$Q2)

> pie(mydataframe$Q2)

> barplot(mydataframe$Q2)

> boxplot.stats(mydataframe$Q2)

$stats

[1] 1 1 1 2 2

$n

[1] 122

$conf

[1] 0.8569535 1.1430465

$out

numeric(0)

> hist(mydataframe$Q2)

> pie(mydataframe)

Error in pie(mydataframe) : 'x' values must be positive.

> pie(mydataframe$Q2)

> stem(mydataframe$Q2)

The decimal point is 1 digit(s) to the left of the |

10 | 00000000000000000000000000000000000000000000000000000000000000000000

11 |

12 |

13 |

14 |

15 |

16 |

17 |

18 |

19 |

20 | 0000000000000000000000000000000000000000000000000000

> plot(mydataframe$Q2,mydataframe$Q1)

> plot(mydataframe$Q2,mydataframe$Q3)

> plot(mydataframe$Q5,mydataframe$Q1)

Error in yaml::yaml.load(..., eval.expr = TRUE) :

Scanner error: while scanning a simple key at line 4, column 1 could not find expected ':' at line 6, column 1

> plot(mydataframe$Q6,mydataframe$Q5)

> plot(mydataframe$Q2,mydataframe$Q8)

> plot(mydataframe$Q8,mydataframe$Q9)

> plot(mydataframe$Q9,mydataframe$Q10)

Error in yaml::yaml.load(..., eval.expr = TRUE) :

Scanner error: while scanning a simple key at line 4, column 1 could not find expected ':' at line 6, column 1

Error in yaml::yaml.load(..., eval.expr = TRUE) :

Scanner error: while scanning a simple key at line 4, column 1 could not find expected ':' at line 6, column 1

> pie(mydataframe$Q5)

> barplot(mydataframe$Q5)