

R Plot

Bar plot

max.temp ← c(22, 27, 26, 24, 25, 26, 28)

Barplot(max.temp)

main = "Maximum temperature in a week",

Xlab = "Degree celsius",

Ylab = "Day",

names.day = c("sun", "mon", "tue", "wed", "thu", "fri",
"sat"),

col = "dark red" // vector to different color
to each bar

horiz = T // to get the graph in horizontal
)

density =



border = black  // to get border

height =

width = c(3, 8) // width of the bar, value will be repeated

space = 5 // space b/w the bar,


legend.text = + // representation of each bar

$$Cas = 1 \quad // \quad \begin{bmatrix} 1 \\ 2 \\ 1 \\ a \end{bmatrix}$$

$L_{AS} = 2$ // $\therefore \begin{matrix} \square \\ S_{us} \end{matrix} \begin{matrix} \square \\ S_{us} \end{matrix}$

$L_{GS} = 3 \text{ // } \begin{bmatrix} 2 \\ 1 \\ 0 \end{bmatrix} \begin{array}{c} \square \\ \square \\ \square \end{array} \begin{array}{c} \square \\ \square \\ \square \end{array}$

beside = T // to get grouped by's plot

angle = c(45, 60, 90) // 

sub = "footer" // discription.

$$x_{Lin}, y_{Lin} = C(10, 20) //$$

Pie chart

section; Pie (20)

Eg $x = (1, 1, 1, 2, 3, 3, 4, 4, 4)$

$$y = \text{table}(x)$$
$$P_{ie}(g)$$

Team Herding

$$> \text{pre}(y, \text{mean} = \text{first})$$

$X = \text{interval values}$

- Labels - to give label name for slices
- Edges - circular o/p of pie is approximated by a polygon with many edges [default 200]
- Radius : to change radius, default - 8
- Clockwise = to label in clockwise direction
(Counterwise = r)
- density : to shade pie
- Col = to give color
- border = to give border.

histogram

$x = c[1, 1, 1, 1, 2, 2, 2, 2, 3, 3, 3, 4, 4]$

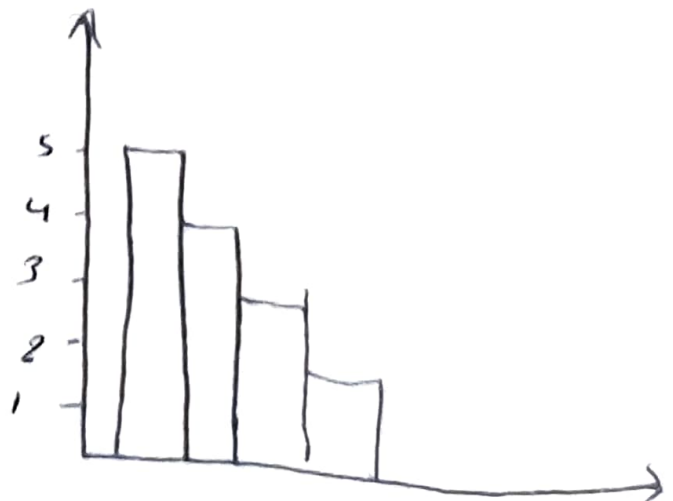
$y = \text{table}(x)$

$> y$

$> x$

1	2	3	4
5	4	3	2

$> \text{hist}(x)$



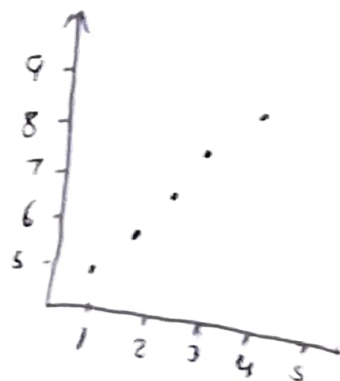
To see graphically

> ckt (x, b)

- main : heading
- Xlab = X axis name
- Ylab = Y axis name
- xlim : x limit
- ylim : y limit
- col ; color
- density : shading
- Freq : get the probability distribution instead of frequency
Freq = false.
- las - to show the limit values horizontally.
las = True
- ~~border = no. of cell~~
- Count : no. of observation falling in that cell.

Scatter plot

> plot (c(5, 6, 7, 8, 9))



- main = heading
- Xlab = X axis name
- Ylab = Y axis name

col : color

type : 'p' for point

'l' for line

'b' both line & point --

'e' - for line part alone of 'b'

'n' - for histogram

's' for stairs

n so plot17

Box Plot

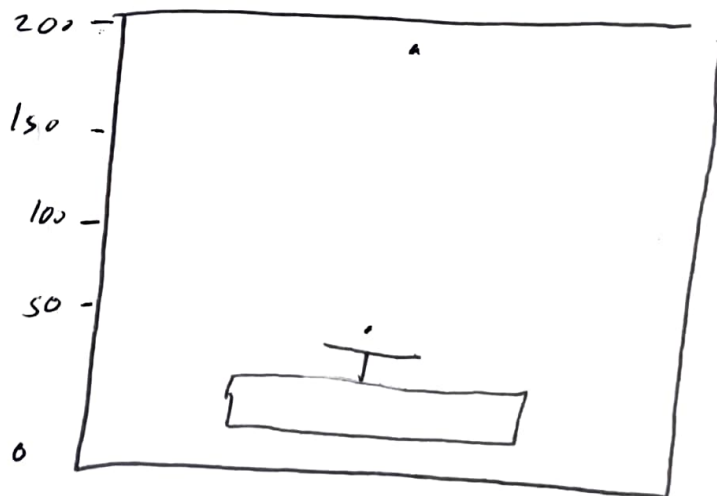
> x = c(1,1,1,1, 2, 2, 2, 3, 3, 3, 3, 4, 4, 4, 5, 100, 100)

> boxplot(x)

> x = c(1,1,1,1, 2, 2, 2, 3, 3, 3, 3, 4, 4, 4, 5, 10, 10, 10, 20, 20, 20, 45, 200)

└─┘

here 45 and 200 are outliers



82

Sty (airquality)

data frame : 153 obs 6 variable

\$ ozone : int 41 36 12 18 NA 28 23 14 8 NA

\$ Sober.R : int 140 110 144 213 NA NA 299 44 14 145

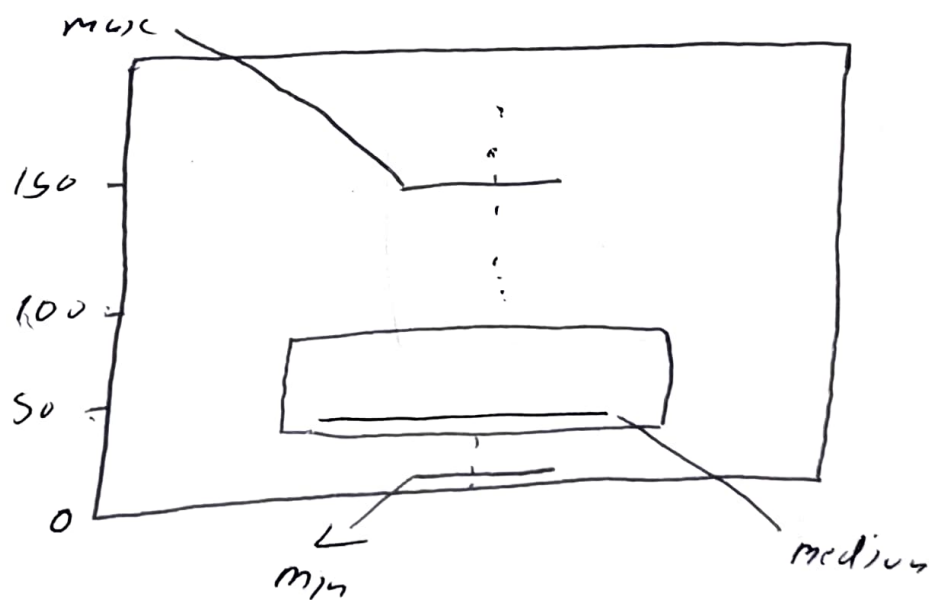
\$ wind : num 74 8 12.6 11.5 14.3 14.4 8.6 13.8 2.4 8.1

\$ Temp : int 67 72 74 62 56 65 55 54 63 69

\$ month : int 5 5 5 5 5 5 5 5 5 5

\$ day : int 1 2 3 4 5 6 7 8 9 10

> box plot (air quality \$Ozone.



$$\text{range} = \text{max} - \text{min}$$

- main - heading.
- Xlab : x axis name.
- ylab : y axis name.
- notch : to change shape.

horizontal

Multiple box in single plot

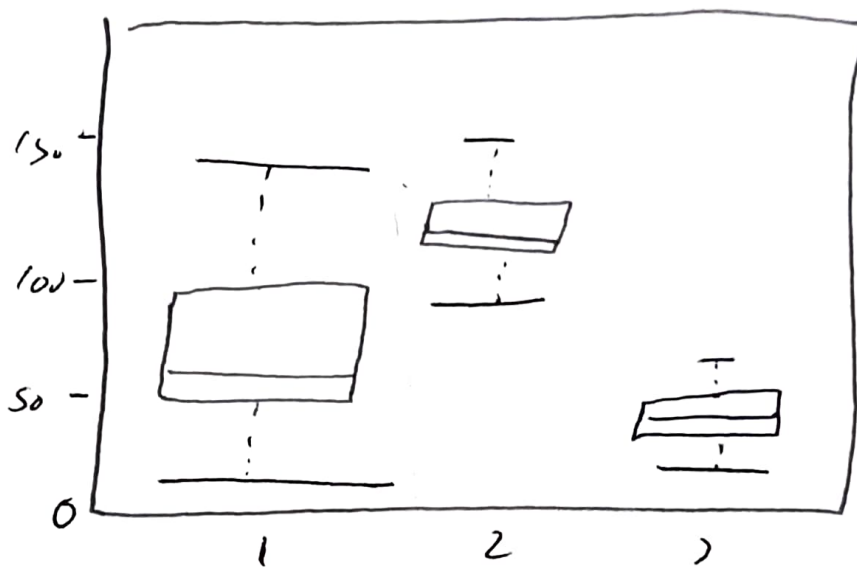
eg

> o2 - quality \$ o2one

> temp - quality \$ temp

> wind = quality \$ wind

> boxplot(o2, temp, wind)



boxwidth - To change box width

border - To change border color.