

format(x, digits, nsmall, scientific, width,
justify = c("left", "right", "centre", "none"))

nchar(x)

to upper(x) } capital and small
tolower(x) }

Bar plot

- barplot()

we can supply a vector or matrix as I/O

- If we supply a vector the plot will have bars
their height equal to the elements in the
vector.

eg. temp = c(27, 26, 23, 24,)
barplot(temp)

main - heading

xlab - x axis name

ylab - y axis name

name.arg - name of each bar

col - color name of bar

horiz - horizontal graph (horiz TRUE)

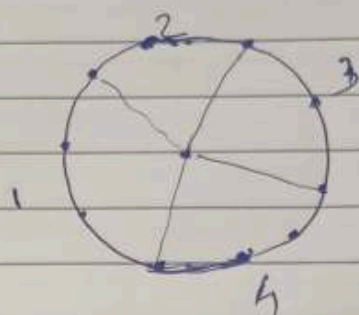
~~sh~~ density - shading (density = 10)

border - border color

Pie chart

function: `pie(x)`

Eg: `x = c(1, 1, 1, 2, 2, 3, 3, 4, 4, 4)`
`y = table(x)`
`pie(y)`



main - heading

`Pie(y, main = "first")`

`x` - input values

labels - to give labels names for slices

edges - circular o/p of `pie` is approximated by a polygon with many edges (default 200)

radius - to change radius, default - 0.8
max 1

clockwise - to plot in clockwise direction
(clockwise = T)

density - To shade picture

Eg: `density = c(10, 20, 30, 40) =`
def shading each slice

col - to give colors `col = rainbow(15)`

border - to give border `border = F`

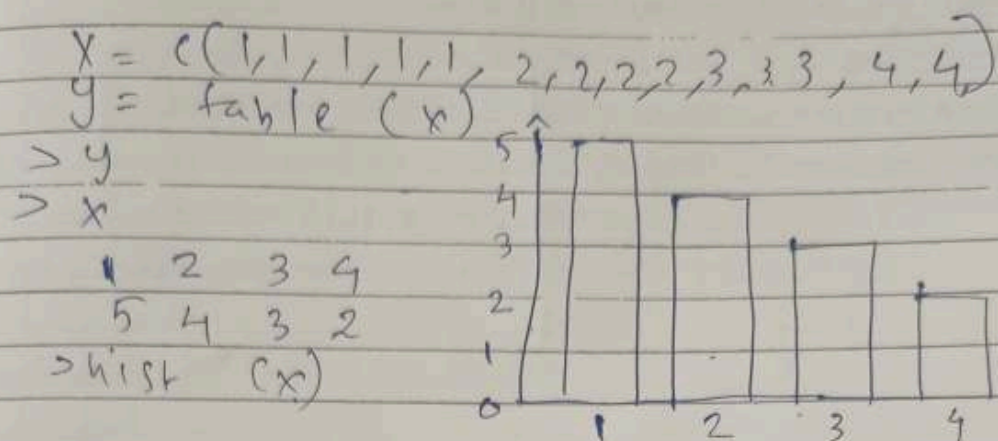
we can make 3D by installing `plotrix`

Eg: `pie3D(y)`

> `pie3D(y, explode = .2)`

It makes the pie chart into pieces.

Hylogram



To see grouping.

$> \text{wt}(x, 6)$

- main - heading
- xlab - x axis name
- ylab - y axis name
- xlim - x limit
- ylim - y limit
- col - colour

density - shading density - $c(20, 30, 40)$

freq - get the probability density instead of
freq.

freq = FALSE

las - to show the limit values horizon
tally

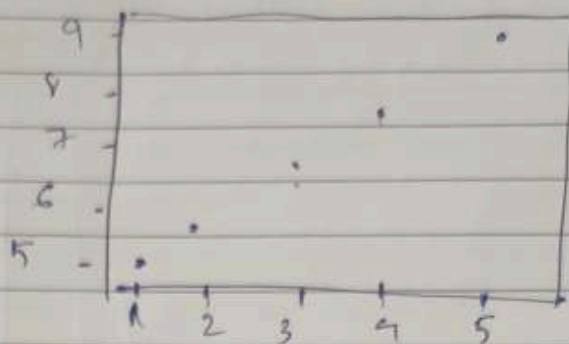
las = TRUE

border - set border
border = F

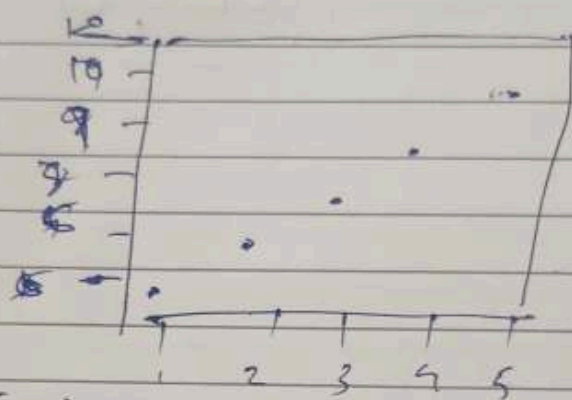
breaks - no of cells we want
place where the break occur.

counts - no of observation falling in that
cell.

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



> x = 1:5
 > y = 6:10
 > plot(x, y)



main - heading

xlab

ylab

col - color

type - 'p' for points
 'l' for lines

'b' both line and point — • —

'e' for line part alone of 'b'

'o' over plotted — • —

'h' for histogram

's' for stain

'8' "

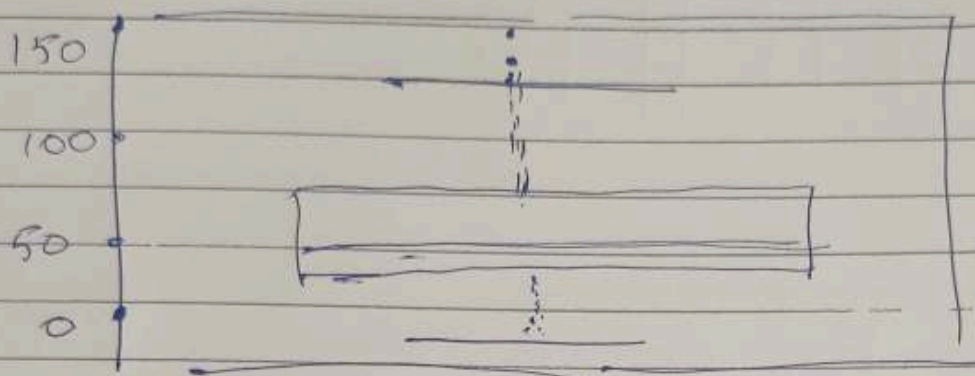
'n' no plotting

Box plot

quantitative data plotting
function - boxplot

Example:

> boxplot (airquality and ozone.)



main

xlab

ylab

col

• notch - notches in the plot • notch = T
horizontal .. horizontal T

display boxplot horizontal

multiple boxplot:

- > o3 = air quality and ozone
- > temp = air quality and temp
- > wind = air quality and wind
- > boxplot (o3, temp, wind)

• Var width:

changed the box width

var width = 1

border - if change border color