Graphs & Charts

R Barplot

Plot can Create in R using barplot().

eg: max.temp = c(22, 27, 26, 24, 23, 26, 28)

barplot(max.temp).

main = "maximum temprature".

xlab = "Degree celsius",

ylab = "Day"

col = "red".

names.arg = c ("sun"... "sat")).

or

horiz = TRUE or FALSE.

density = 10.

border = "blue".

→ main → title.

xlab → x axis lable.

ylab → y " "

names.arg → names in x axis.

col → color of graph

horiz → view in horizontal

density → to set shade inside graph.

border → to set border.

space → to specify space blw bars.

angle → to give angle of shading lines.

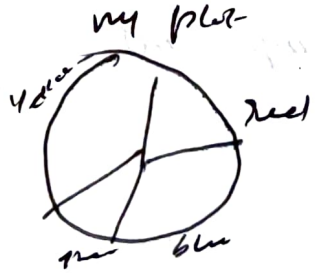
sub → to set title in bottom.

ylim, xlim → to set limit to axis.

- **Pie Chart**

pie()

```
x = c(1,1,1,2,2,3,3,4,9,9)
y = table(x).
pie(y, main = "myplot", labels = c("red", "blue", "green",
    "yellow"), edge = 200, radius = .5, clockwise = T, col = 1:4,
    border = T).
```



library(plotrix)

? pie3D

: pie3D(y, explode = .5)

Histogram

used to plot quantitative values.

hist()

```
> x = c(1,1,1,1,2,2,2,3,3,4,4,4)
> hist(x).
```

→ breaks can be used to divide into different unit.

main → heading.

→ xlab, ylab.

→ col

→ freq = F → we can get p.d distribution instead of histogram

→ border

→ density.

{ ? → package.

Return value of hist()

It returns 6 components.

```
> h = hist(x).
> h.
```

$ breaks → place where breaks occur.

$ counts → number of observation

$ density → density of cells.

$ mid → midpoint of cells.

$ name → x argument name.

equidist → value showing if breaks are equally spaced or not.

- Scatter plot

plot()

It is like plotting points in graphs.

```
x = 1:10
y = 21:30.
plot(x,y).
```

> plot(x, y, main = "Scatterplot", xlab = "t values", ylab = "y values", col = 1:10)

type

p → point

l → line.

"b" → both lines and points

c → dashed line.

o → overplotted.

h → like histogram.

s → stair upper.

S → stair down.

n → for no plotting.

Box plot

Produce box and whisker plots.

· quantitative dep.

```
> str (airquality).
> boxplot (airquality$ ozone).
> boxplot (airquality$ ozone, main = " mean ozone in
  parts per mill", xlab = " parts per bill:", ylab= "Ozon
  col = "red", notch = T).
```