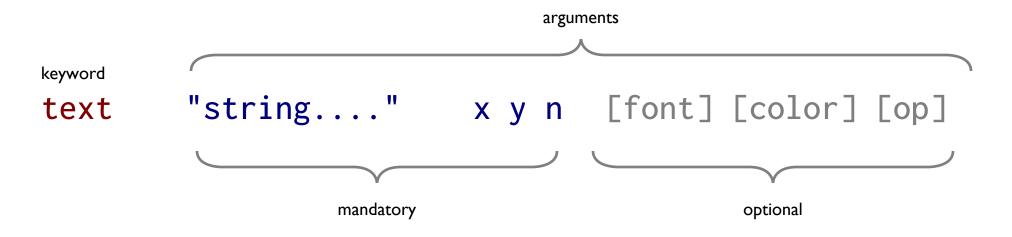
## decksh reference



## Keywords

Structure	Text	Lists	Graphi	CS	Braces	Arrows
deck edeck slide eslide canvas include grid	text ctext etext rtext arctext textblock textfile textcode	list blist nlist clist li elist	acircle arc circle curve ellipse hline line	pill polygon rect rrect square star vline	lbrace rbrace ubrace dbrace	arrow crarrow clarrow cuarrow cdarrow
Images	Charts	Loop	Assigni	ments	Data	
image cimage	dchart legend	for efor	polarx polary area	format random vmap	data edata	

## Keywords and arguments

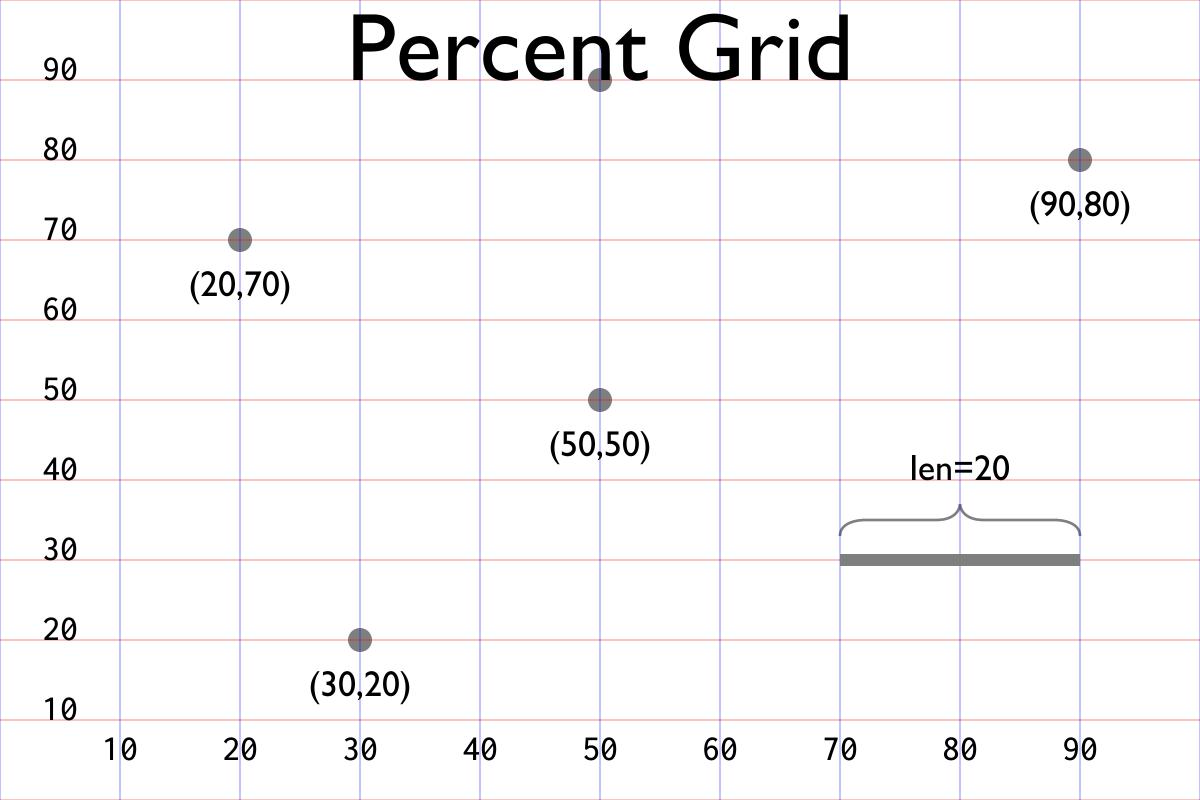


text	"hello,	world"	80	50	2				hello, world
text	"hello,	world"	80	40	2	"serif"			hello, world
text	"hello,	world"	80	30	2	"serif"	"red"		hello, world
text	"hello,	world"	80	20	2	"serif"	"red"	50	hello, world

#### Structure

```
deck
                                                                            canvas size hint (width height)
                         canvas 1920 1080
                    slide
text "first slide" 50 50 2
deck
                    slide "black" "white"
  include "file.dsh"
eslide

ctext "hello, v
circle 50 0 100
for x=20 80 10
  circle x 75
efor
                                                                            ctext "hello, world" 50 25 10
                                                                            circle 50 0 100 "blue"
                                                                                circle x 75 2
                 edeck
```



## Object Index

hello, world

The quick brown fox jumped over the lazy dog

what's UP, D

**Graphics** 

**Text** 







**Images** 





Lists

- First
- Second
- Third

- I. First
- 2. Second
- 3. Third

First Second Third

**Arrows** 





**Braces** 



#### Textual Elements

```
Left-aligned
                         "..." x y fontsize [font] [color] [op] [link]
               text
                        "..." x y fontsize [font] [color] [op] [link]
Centered
               ctext
End-aligned
               etext "..." x y fontsize [font] [color] [op] [link]
               rtext "..." x y angle fontsize [font] [color] [op] [link]
Rotated
Text on an arc
               arctext "..." x y rad a1 a2 fontsize [font] [color] [op] [link]
               textblock "..." x y w fontsize [font] [color] [op] [link]
Block text
File contents
               textfile "file" x y fontsize [font] [color] [op] [spacing]
Code listing
              textcode "file" x y w fontsize [color]
```

text "..." x y fontsize [font] [color] [op] [link]

abc

abc

text "abc" 20 20 4

text "abc" 75 20 7 "mono" "maroon"



ctext "..." x y fontsize [font] [color] [op] [link]

abc

abc

ctext "abc" 20 20 4

ctext "abc" 80 20 7 "mono" "maroon"

# hello, world (x,y)

etext "..." x y fontsize [font] [color] [op] [link]

abc

abc

etext "abc" 20 20 4

etext "abc" 80 20 7 "mono" "maroon"



rtext "..." x y angle fontsize [font] [color] [op] [link]

abc

abc

ctext 20 20 30 3 ctext 50 20 9



arctext "..." x y radius a1 a2 fontsize [font] [color] [op]

arctext "What is up" 25 20 10 180 90 3 "mono" arctext "This is curvy" 75 30 10 180 360 3 "mono"

(x,y) "Where justice is denied, where poverty is enforced, where ignorance prevails, and where any one class is made to feel that society is an organized conspiracy to oppress, rob and degrade them, neither persons nor property will be safe."

#### textblock "..." x y w fontsize [font] [color] [op]

"Where justice is denied, where poverty is enforced, where ignorance prevails, and where any one class is made to feel that society is an organized conspiracy to oppress, rob and degrade them, neither persons nor property will be safe."

"Where justice is denied, where poverty is enforced, where ignorance prevails, and where any one class is made to feel that society is an organized conspiracy to oppress, rob and degrade them, neither persons nor property will be safe."

textblock "..." 10 35 30 2

textblock "..." 50 35 10 1 "sans" "maroon"

(x,y) This is the contents
of a file. it has lines of text.
Reading is fundamental.

#### textfile "filename" x y fontsize [font] [color] [op]

package main

import "fmt"

textfile "hw.go" 55 35 1.6 "mono" "maroon"

This is the contents of a file. it has lines of text. Reading is fundamental.

func main() {
 fmt.Println("hello, world")
}

textfile "example.txt" 10 35 2

```
package main
import "fmt"

func main() {
   fmt.Println("hello, world")
}
```

#### textcode "filename" x y w fontsize [color]

```
package main

import "fmt"

func main() {
    fmt.Println("hello, world")
}
```

textcode "hw.go" 10 35 25 1.0

```
package main

import "fmt"

func main() {
    fmt.Println("hello, world")
}
```

textcode "hw.go" 55 35 40 1.6 "maroon"

### Graphical Elements

```
Line
                        line
                                  x1 y1 x2 y2 lw [color] [op]
Horizontal line
                       hline
                                  x y w [lw] [color] [op]
Vertical line
                       vline
                                  x y h [lw] [color] [op]
Elliptical arc
                                  x y w h a1 a2 [lw] [color] [op]
                       arc
Quadratic Bezier
                                  bx by cx cy ex ey [lw] [color] [op]
                       curve
Circle
                       circle
                                  x y w [color] [op]
Area circle
                       acircle
                                  x y area [color] [op]
Ellipse
                       ellipse
                                  x y w h [color] [op]
Square
                                  x y w [color] [op]
                        square
Rectangle
                                  x y w h [color] [op]
                        rect
Rounded rectangle
                                  x y w h radius [color]
                        rrect
Pill shape
                       pill
                                  xywh[color]
Polygon
                                  "x1 x2...xn" "y1 y2...yn" [lw] [color] [op]
                       polygon
N-sided star
                                  x y sides inner outer [color] [op]
                       star
```



#### line x1 y1 x2 y2 lw [color] [op]



line 70 20 95 30 1.5 "maroon"



#### hline x y w [lw] [color] [op]

\_\_\_\_

hline 40 20 20 1

hline 70 20 20 5 "maroon" 20



#### vline x y h [lw] [color] [op]





#### arc x y w h a1 a2 [lw] [color] [op]





#### curve bx by cx cy ex ey [lw] [color] [op]









#### circle x y w [color] [op]









#### acircle x y area [color] [op]







ellipse x y w h [color] [op]





#### square x y w [color] [op]







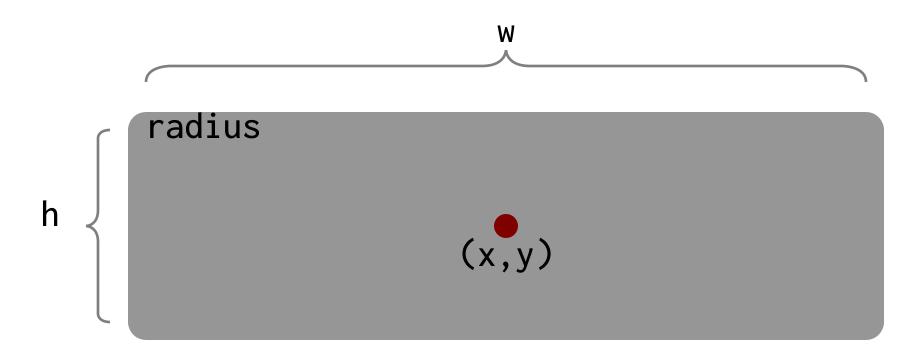


#### rect x y w h [color] [op]









#### rrect x y w h radius [color] [op]







#### pill x y w h [color]



pill 20 20 10 5





polygon "x1 x2...xn" "y1 y2...yn" [color] [op]







#### star x y sides inner outer [color] [op]







## *Images*

Captioned image cimage "file" "caption" x y w h [scale] [link]



#### image "file" x y w h [scale] [link]





image "follow.jpg" 75 25 640 480 30



cimage "file" "caption" x y w h [scale] [link] [capsize]



sky



sky

cimage "cloudy.jpg" "sky" 75 25 640 480 30 "" 1.5

## Lists

Plain list	list	<pre>x y fontsize [font] [color] [op] [spacing]</pre>
Bullet list	blist	<pre>x y fontsize [font] [color] [op] [spacing]</pre>
Numbered list	nlist	<pre>x y fontsize [font] [color] [op] [spacing]</pre>
Centered list	clist	x y fontsize [font] [color] [op] [spacing]

```
list
(x,y) li "first"
li "second"
li "third"
elist
```

#### list x y fontsize [font] [color] [op] [spacing]

```
one
list 20 30 2.5
                                   list 85 30 4 "serif" "maroon" 100 1.0
                one
   li "one"
                                       li "one"
                                                                               two
                two
   li "two"
                                       li "two"
                                                                               three
   li "three"
                                       li "three"
                three
elist
                                   elist
```

```
blist
(x,y) li "first"
    li "second"
    li "third"
    elist
```

#### blist x y fontsize [font] [color] [op] [spacing]

```
blist 20 30 2.5 • one

li "one"

li "two"

li "three"

elist

blist 85 30 4 "serif" "maroon" 100 1.0

two

li "one"

li "two"

li "three"

elist
```

```
nlist
(x,y) li "first"
li "second"
li "third"
elist
```

### nlist x y fontsize [font] [color] [op] [spacing]

```
nlist 20 30 2.5 | I. one

li "one"
li "two" | 2. two
li "three"
elist | 3. three | 3. three
```

```
(x,y) li "first"
    li "second"
    li "third"
    elist
```

#### clist x y fontsize [font] [color] [op] [spacing]

```
clist 35 30 2.5 first one clist 90 30 4 "serif" "maroon" 100 1.0 first

li "first one" li "first" next

li "next" li "next"

li "and last" and last

elist one clist 90 30 4 "serif" "maroon" 100 1.0 first

li "first" and last

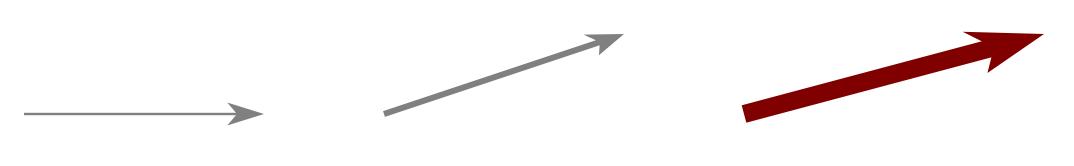
elist
```

## Arrows

Straight	arrow	x1 y1 x2 y2 [lw] [aw] [ah] [color] [op]
Left curved	lcarrow	bx by cx cy ex ey [lw] [aw] [ah] [color] [op]
Right curved	rcarrow	bx by cx cy ex ey [lw] [aw] [ah] [color] [op]
Up curved	ucarrow	bx by cx cy ex ey [lw] [aw] [ah] [color] [op]
Down curved	dcarrow	bx by cx cy ex ey [lw] [aw] [ah] [color] [op]



### arrow x1 y1 x2 y2 [lw] [aw] [ah] [color] [op]





#### lcarrow bx by cx cy ex ey [lw] [aw] [ah] [color] [op]



lcarrow 30 20 30 35 15 35

lcarrow 70 20 70 35 55 35 1 5 5 "maroon"



#### rcarrow bx by cx cy ex ey [lw] [aw] [ah] [color] [op]



rcarrow 50 20 50 35 70 35 1 5 5 "maroon"



#### ucarrow bx by cx cy ex ey [lw] [aw] [ah] [color] [op]





ucarrow 15 20 30 20 30 35

rcarrow 50 20 70 20 70 35 1 5 5 "maroon"



#### dcarrow bx by cx cy ex ey [lw] [aw] [ah] [color] [op]





dcarrow 15 35 30 30 20

dcarrow 50 35 70 35 70 20 1 5 5 "maroon"

# Braces

Left brace	1brace	x y fontsize bw bh [lw] [color] [op]
Right brace	rbrace	x y fontsize bw bh [lw] [color] [op]
Up brace	ubrace	x y fontsize bw bh [lw] [color] [op]
Down brace	dbrace	x y fontsize bw bh [lw] [color] [op]



#### lbrace x y h bw bh [lw] [color] [op]





#### rbrace x y h bw bh [lw] [color] [op]





#### ubrace x y w bw bh [lw] [color] [op]









dbrace x y w bw bh [lw] [color] [op]



# Loop, Assignments and Data

Loop

Polar coordinate (x)

Polar coordinate (y)

Area

Formatted text

Random number

Value mapping

In-line data

for v=

x=polarx

y=polary

value=area

value=format

value=random

value=vmap

data

begin end [increment] ... efor

x y radius angle

x y radius angle

expression

fmt expression

min max

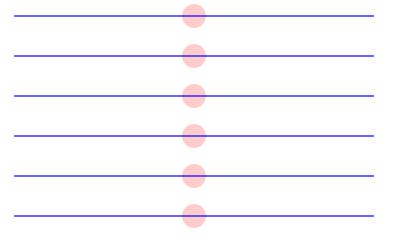
data min1 max1 min2 max2

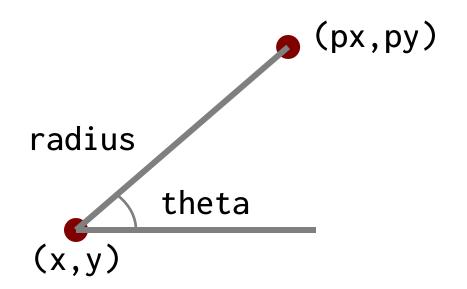
"file" ... edata

for v=begin end [increment]
...items to repeat using v
efor

#### for v=begin end [increment]...efor

for v=10 35 5 hline 50 v 30 0.1 "blue" circle 65 v 2 "red" 20 efor





px=polarx x y radius theta
py=polary x y radius theta

cpx=60
cpy=20
px1=polarx cpx cpy 10 30
py1=polary cpx cpy 10 30
line cpx cpy px1 py1
circle cpx cpy 1 "gray"
circle px1 py1 2 "maroon"



#### value=area expression

```
m1=100
m2=200
a1=area m1
a2=area m2
circle 60 20 a1 "maroon"
circle 80 20 a2
```

#### value=format fmt expression

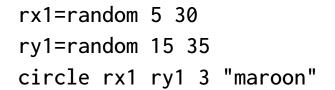
```
v1=100.3
v2=200.234
title=format "%.2f Million (USD)" v1
subtitle=format "Total value: %.2f" v1+v2
ctext title     80 30 4 "sans" "maroon"
ctext subtitle 80 20 3 "sans" "gray"
```

### 100.30 Million (USD)

Total value: 300.53



#### value=random min max





#### value=vmap data min1 max1 min2 max2

```
yrmin=1776
yrmax=2021
smin=60
smax=90
vp=vmap 1945 yrmin yrmax smin smax
line smin 20 smax 20 0.5 "gray" 20
circle smin 20 1
circle smax 20 1
circle vp 20 2 "maroon"
```

data "file.d" ← data file
first 20
second 100 data values
third 200
edata

#### data "filename" ... edata

