



AlgebraOfGraphics.jl Cheat Sheet

```
df_one = (A=[1,4,6,8], B=[2,6,4,5], C=[3,2,1,0], D=["a","b","c","d"])
df_two = (E=repeat(["e","f"],inner=50), F=[randn(50);randn(50)+3])
df_three = (G=1:30, H=sin.(range(0,2pi,30)).+rand.(), I=cos.(range(0,2pi,30)).+rand.())
df_four = (J=repeat(1:3,3), K=repeat(1:3,inner=3), L=[0,1,2,0.5,2,4,1,4,5])
df_five = (M=repeat(1:3,3), N=[0,2,3,0.5,3.5,5,1.5,7], O=repeat(["g","h","i"],inner=3))
df_six = (P=1:4, Q=["A","B","A","B"], R=4:-1:1, S=[0.5,0.6,0.3,0.7], T=[5.1,3.9,2.7,1.5], U=[1,1,2,2])
```

data(df_one) * mapping(:A, :B)

- * visual(Scatter)
- * mapping(color=:C)
* visual(Scatter)
- * mapping(color=:C)
* visual(Scatter) |>
draw(scales(Color=:;colormap=:plasma))
- * mapping(color=:D)
* visual(Scatter)
- * mapping(color=:D)
* visual(Scatter) |>
draw(scales(Color=:;palette=:Set1_5))
- * visual(Lines)
- * visual(ScatterLines)
- * visual(Stairs)
- * visual(BarPlot)
- * visual(BarPlot,direction=:x)
- * mapping(text=:D=>verbatim)
* visual(Makie.Text)
- * mapping(text=:D=>verbatim)
* visual(Annotation)

data(df_one) * mapping(:A)

- * visual(HLines)
- * visual(VLines)

data(df_two) * mapping(:E, :F)

- * visual(Violin)
- * visual(Violin,orientation=:horizontal)
- * visual(BoxPlot)
- * visual(BoxPlot,orientation=:horizontal)

data(df_two) * mapping(:F)

- * histogram()
- * AoG.density()
- * visual(QQNorm)

data(df_three) * mapping(:G, :H)

- * smooth()

- * linear()
- * AoG.density()

data(df_four) * mapping(:J, :K, :L)

- * visual(Heatmap)
- * contours(bands=4)
- * filled_contours(bands=4)

data(df_five) * mapping(:M, :N)

- * mapping(group=:0)
* visual(Lines)
- * mapping(color=:0)
* visual(Lines)
- * mapping(linestyle=:0)
* visual(Lines)
- * mapping(marker=:0)
* visual(ScatterLines)
- * mapping(color=:0,dodge=:0)
* visual(BarPlot)
- * mapping(color=:0,stack=:0)
* visual(BarPlot)

- * mapping(row=:0)
* visual(Lines)
- * mapping(col=:0)
* visual(Lines)
- * mapping(layout=:0)
* visual(Lines)

data(df_six)

- * (mapping(:P,:R) * visual(BarPlot)
+ mapping(:P,:R,:S) *
visual(Errorbars))
- * (mapping(:P,:R) * visual(BarPlot)
+ mapping(:P,:R,:S,:S=>x->2x) *
visual(Errorbars))
- * mapping(group=:0)
* visual(Lines)
- * (mapping(:U,:R,dodge=:Q,color=:Q) *
visual(BarPlot)
+ mapping(:U,:R,:S,dodge_x=:Q) *
visual(Errorbars))

Others

- data(df_one) * mapping(:A,:B) *
visual(Scatter) + mapping(2,0.4) *
visual(ABLines)
- mapping(-5,-17,4,6) * visual(Annotation,
text="Here", style=Ann.Styles.LineArrow())