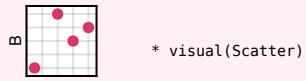




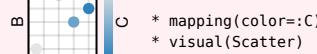
AlgebraOfGraphics.jl Cheat Sheet

```
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)`

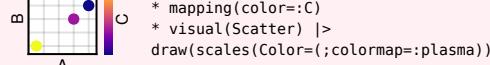


* visual(Scatter)



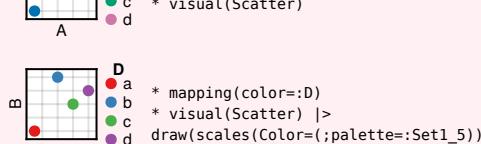
* mapping(color=:C)

* visual(Scatter)



* mapping(color=:D)

* visual(Scatter)



* mapping(color=:D)

* visual(Scatter)



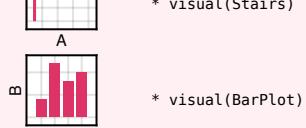
* visual(Lines)



* visual(ScatterLines)



* visual(Stairs)



* visual(BarPlot)

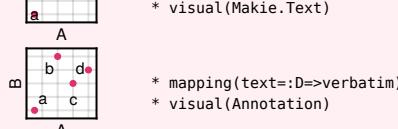


* visual(BarPlot,direction=:x)



* mapping(text=:D=>verbatim)

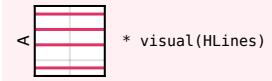
* visual(Makie.Text)



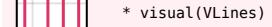
* mapping(text=:D=>verbatim)

* visual(Annotation)

`data(df_one) * mapping(:A)`

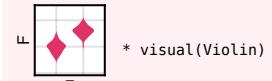


* visual(HLines)

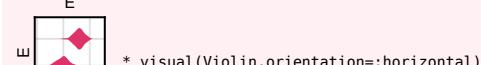


* visual(VLines)

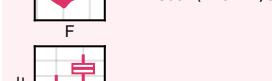
`data(df_two) * mapping(:E, :F)`



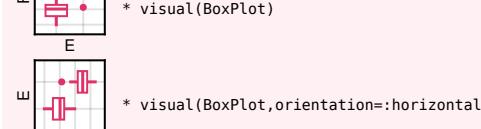
* visual(Violin)



* visual(Violin,orientation=:horizontal)



* visual(BoxPlot)



* visual(BoxPlot,orientation=:horizontal)

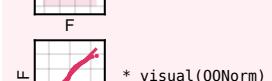
`data(df_two) * mapping(:F)`



* histogram()



* AoG.density()

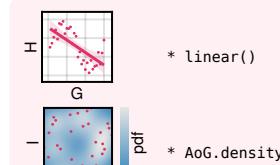


* visual(QQNorm)

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

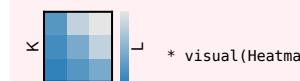


* smooth()



* linear()

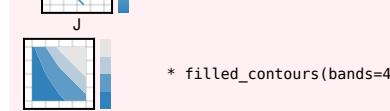
`data(df_four) * mapping(:J, :K, :L)`



* visual(Heatmap)



* contours(bands=4)



* filled_contours(bands=4)

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



* mapping(group=:0)

* visual(Lines)



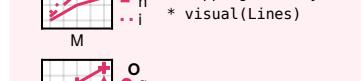
* mapping(color=:0)

* visual(Lines)



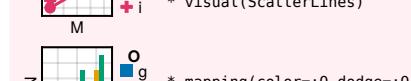
* mapping(linestyle=:0)

* visual(Lines)



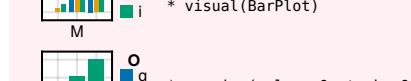
* mapping(marker=:0)

* visual(ScatterLines)



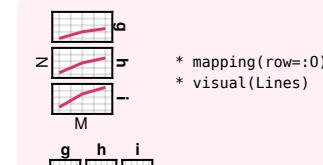
* mapping(color=:0,dodge=:0)

* visual(BarPlot)



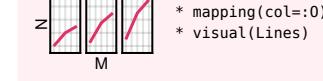
* mapping(color=:0,stack=:0)

* visual(BarPlot)



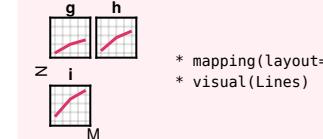
* mapping(row=:0)

* visual(Lines)



* mapping(col=:0)

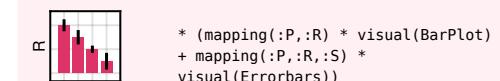
* visual(Lines)



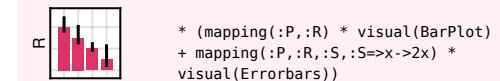
* mapping(layout=:0)

* visual(Lines)

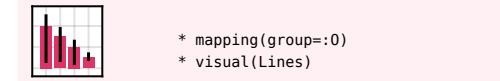
`data(df_six)`



* (mapping(:P,:R) * visual(BarPlot) + mapping(:P,:R,:S,:S=>x->2x) * visual(Errorbars))

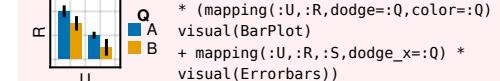


* (mapping(:P,:R) * visual(BarPlot) + mapping(:P,:R,:S,:S=>x->2x) * visual(Errorbars))



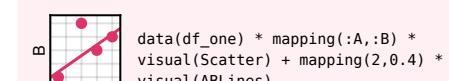
* mapping(group=:0)

* visual(Lines)

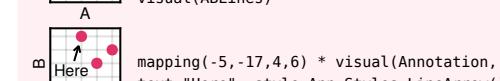


* (mapping(:U,:R,dodge=:Q,color=:Q) * visual(BarPlot) + mapping(:U,:R,:S,dodge_x=:Q) * visual(Errorbars))

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())