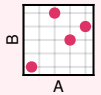
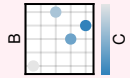
AlgebraOfGraphics.jl Cheat Sheet

```
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])
```

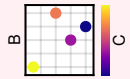
data(df_one) * mapping(:A, :B)



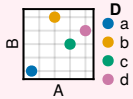
```
* visual(Scatter)
```



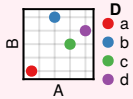
```
* mapping(color=:C)
* visual(Scatter)
```



```
* mapping(color=:C)
* visual(Scatter) |>
draw(scales(Color=(;colormap=:plasma))
```

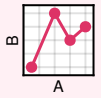


```
* mapping(color=:D)
* visual(Scatter)
```

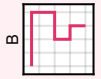


```
* mapping(color=:D)
* visual(Scatter) |>
draw(scales(Color=(;palette=:Set1_5))
```

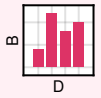
```
* visual(Lines)
```



```
* visual(ScatterLines)
```

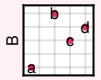


```
* visual(Stairs)
```

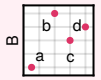


```
* visual(BarPlot)
```

```
* visual(BarPlot,direction=:x)
```

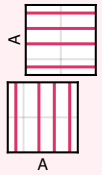


```
* mapping(text=:D=>verbatim)
* visual(Makie.Text)
```



```
* mapping(text=:D=>verbatim)
* visual(Annotation)
```

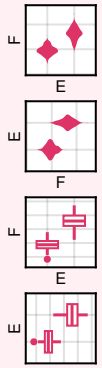
data(df_one) * mapping(:A)



```
* visual(HLines)
```

```
* visual(VLines)
```

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



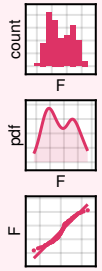
```
* visual(Violin)
```

```
* visual(Violin,orientation=:horizontal)
```

```
* visual(BoxPlot)
```

```
* visual(BoxPlot,orientation=:horizontal)
```

data(df_two) * mapping(:F)

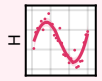


```
* histogram()
```

```
* AoG.density()
```

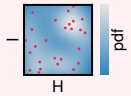
```
* visual(QQNorm)
```

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



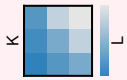
```
* smooth()
```

```
* linear()
```

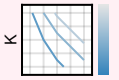


```
* AoG.density()
```

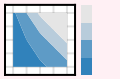
data(df_four) * mapping(:J, :K, :L)



```
* visual(Heatmap)
```



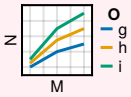
```
* contours(bands=4)
```



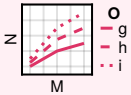
```
* filled_contours(bands=4)
```

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

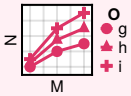
```
* mapping(group=:O)
* visual(Lines)
```



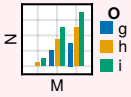
```
* mapping(color=:O)
* visual(Lines)
```



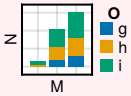
```
* mapping(linestyle=:O)
* visual(Lines)
```



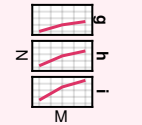
```
* mapping(marker=:O)
* visual(ScatterLines)
```



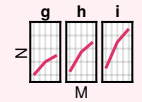
```
* mapping(color=:O,dodge=:O)
* visual(BarPlot)
```



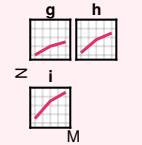
```
* mapping(color=:O,stack=:O)
* visual(BarPlot)
```



```
* mapping(row=:O)
* visual(Lines)
```

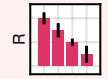


```
* mapping(col=:O)
* visual(Lines)
```

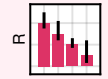


```
* mapping(layout=:O)
* visual(Lines)
```

data(df_six)

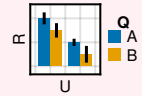


```
* (mapping(:P,:R) * visual(BarPlot)
+ mapping(:P,:R,:S) *
visual(Errorbars))
```



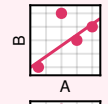
```
* (mapping(:P,:R) * visual(BarPlot)
+ mapping(:P,:R,:S,:S=>x->2x) *
visual(Errorbars))
```

```
* mapping(group=:O)
* visual(Lines)
```

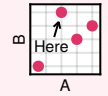


```
* (mapping(:U,:R,dodge=:Q,color=:Q) *
visual(BarPlot)
+ mapping(:U,:R,:S,dodge_x=:Q) *
visual(Errorbars))
```

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())
```