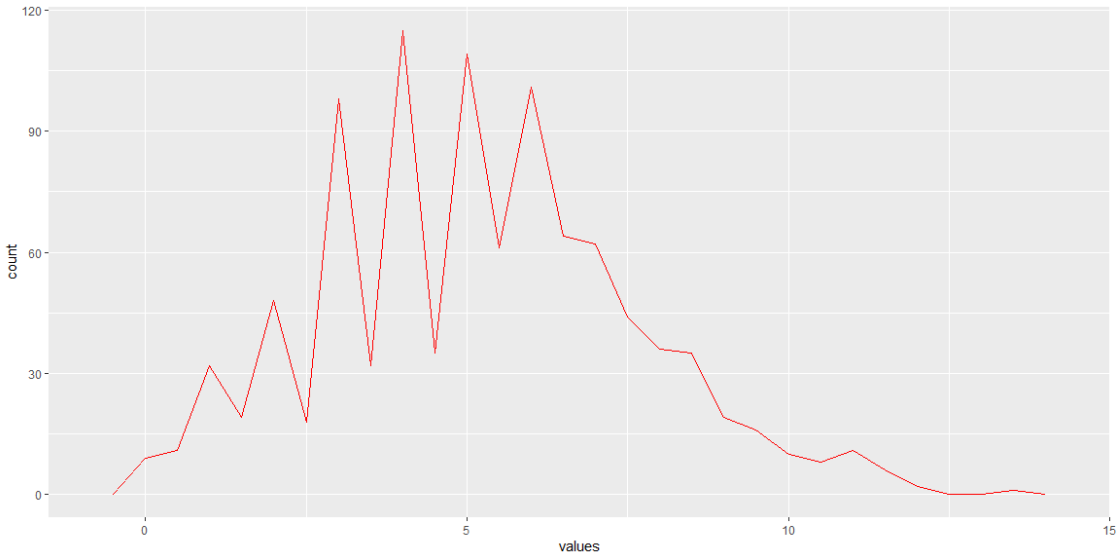
HW_08

izd3

Use only commands & functions that are shown in the indicated chapter or prior chapters.

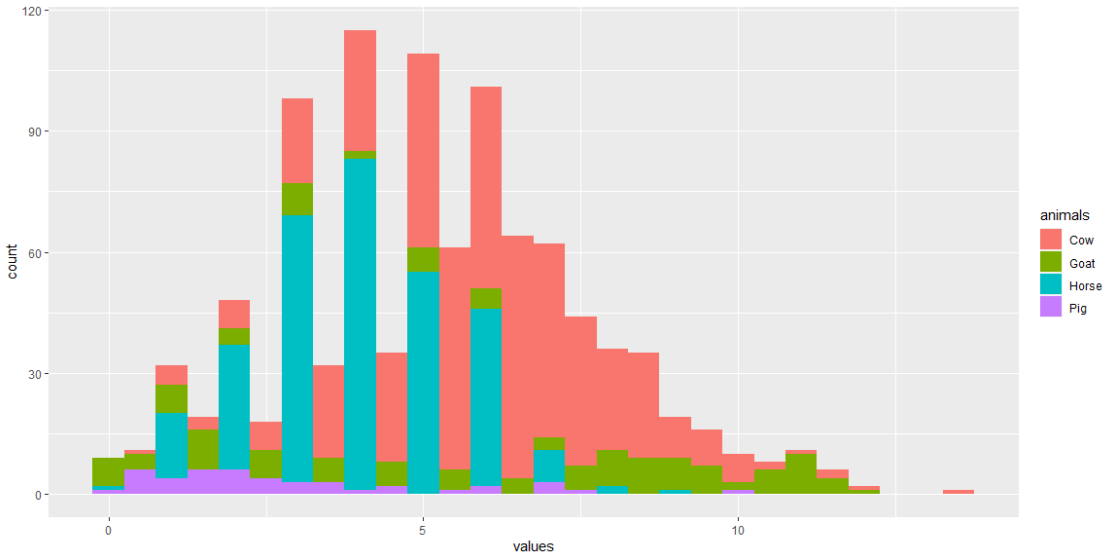
Problem #01 - Chapter 32 Exercise #01D

```
# Show your work here
library(ggplot2)

## Warning: package 'ggplot2' was built under R version 4.2.3

oneVariable001.dat|>
  ggplot(mapping = aes(x=values))+geom_freqpoly(stat =
'bin',binwidth=0.5,color='red')
```



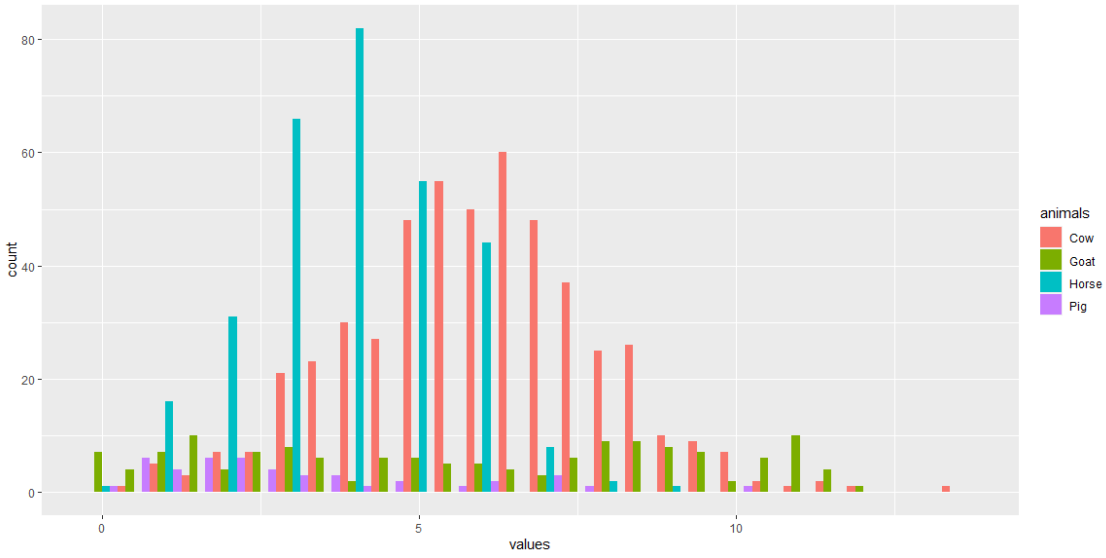
Problem #02 - Chapter 32 Exercise #02A

```
# Show your work here
oneVariable001.dat|>
  ggplot(mapping = aes(x=values,fill=animals))+geom_histogram(binwidth =
0.5,position = 'stack')
```



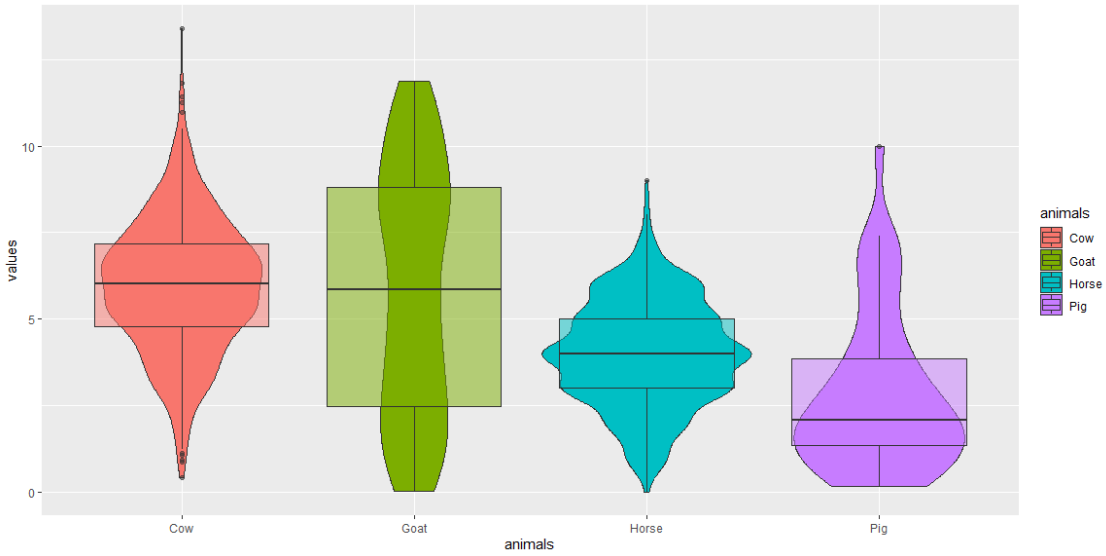
Problem #03 - Chapter 32 Exercise #03A

```
# Show your work here
oneVariable001.dat|>
  ggplot(mapping = aes(x=values,fill=animals))+
  geom_histogram(binwidth = 0.5,position = 'dodge')
```



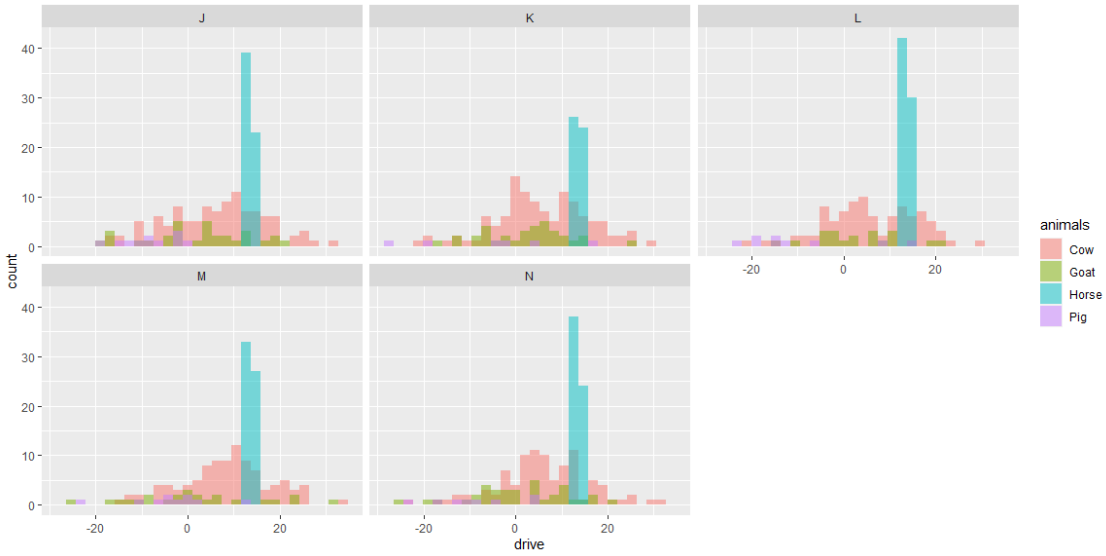
Problem #04 - Chapter 32 Exercise #04B

```
# Show your work here
oneVariable001.dat|>
  ggplot(mapping = aes(x=animals,y=values,fill=animals))+geom_violin()+
  geom_boxplot(alpha=0.5)
```



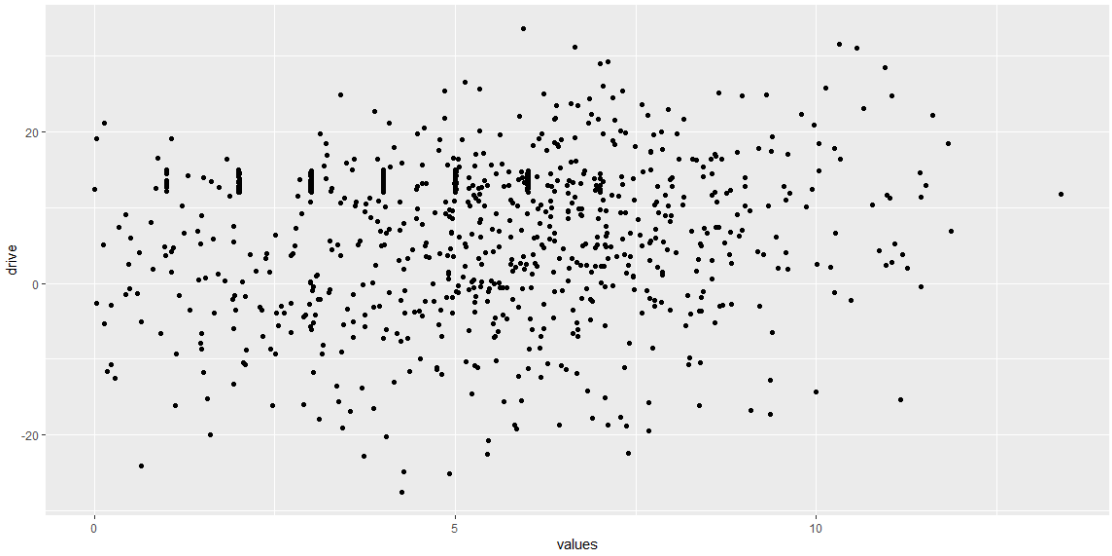
Problem #05 - Chapter 32 Exercise #04C

```
# Show your work here
oneVariable001.dat|>
  ggplot(mapping = aes(x=drive,fill=animals))+
  geom_histogram(position = 'identity',alpha=0.5)+
  facet_wrap(~flops)

## `stat_bin()` using `bins = 30`. Pick better value with `binwidth`.
```



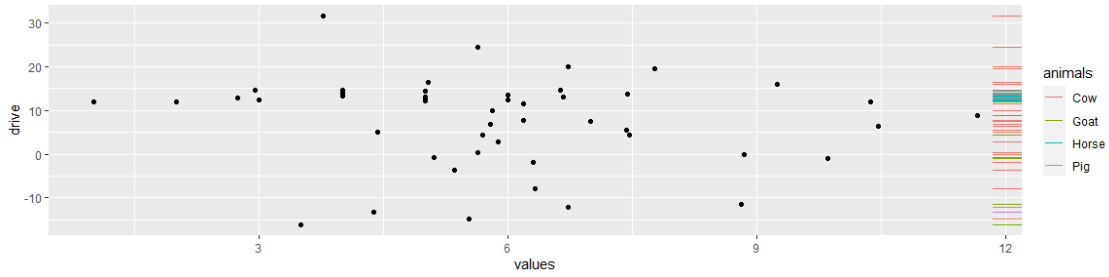
Problem #06 - Chapter 33 Exercise #01A

```
# Show your work here
oneVariable001.dat|>
  ggplot(mapping = aes(x=values,y=drive))+geom_point()
```

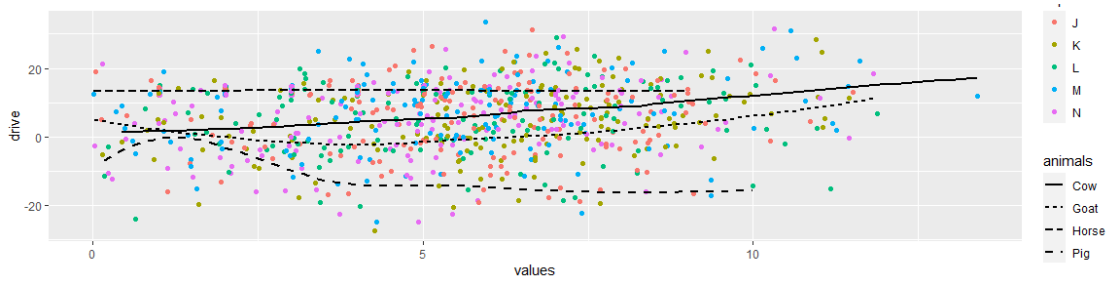


Problem #07 - Chapter 33 Exercise #02AC (Displayed Side-by-Side)

```
# Show your work here
oneVariable002.dat|>
  ggplot(mapping = aes(x=values,y=drive))+geom_point()+
  geom_rug(aes(color=animals),sides = 'r')
```




```
oneVariable001.dat|>
  ggplot(mapping = aes(x=values,y=drive,color=flops))+geom_point()+
  geom_smooth(aes(linetype=animals),se=F,color='black')

## `geom_smooth()` using method = 'loess' and formula = 'y ~ x'
```



Problem #08 - Chapter 33 Exercise #04 (Use Minard dataframes in HistData package)

```
# Show your work here
library(HistData)

## Warning: package 'HistData' was built under R version 4.2.3

Minard.cities|>
  ggplot(mapping = aes(x=lat,y=long))+geom_point()+
  geom_text(aes(label=city),nudge_y =-1 )+
  geom_ribbon(data = Minard.troops,
              mapping =aes(x=lat,y=long,
                           ymin=long-survivors/max(survivors),
                           ymax=long+survivors/max(survivors),fill=direction))
```