ICA12

2022-10-11

Contents

Question 1

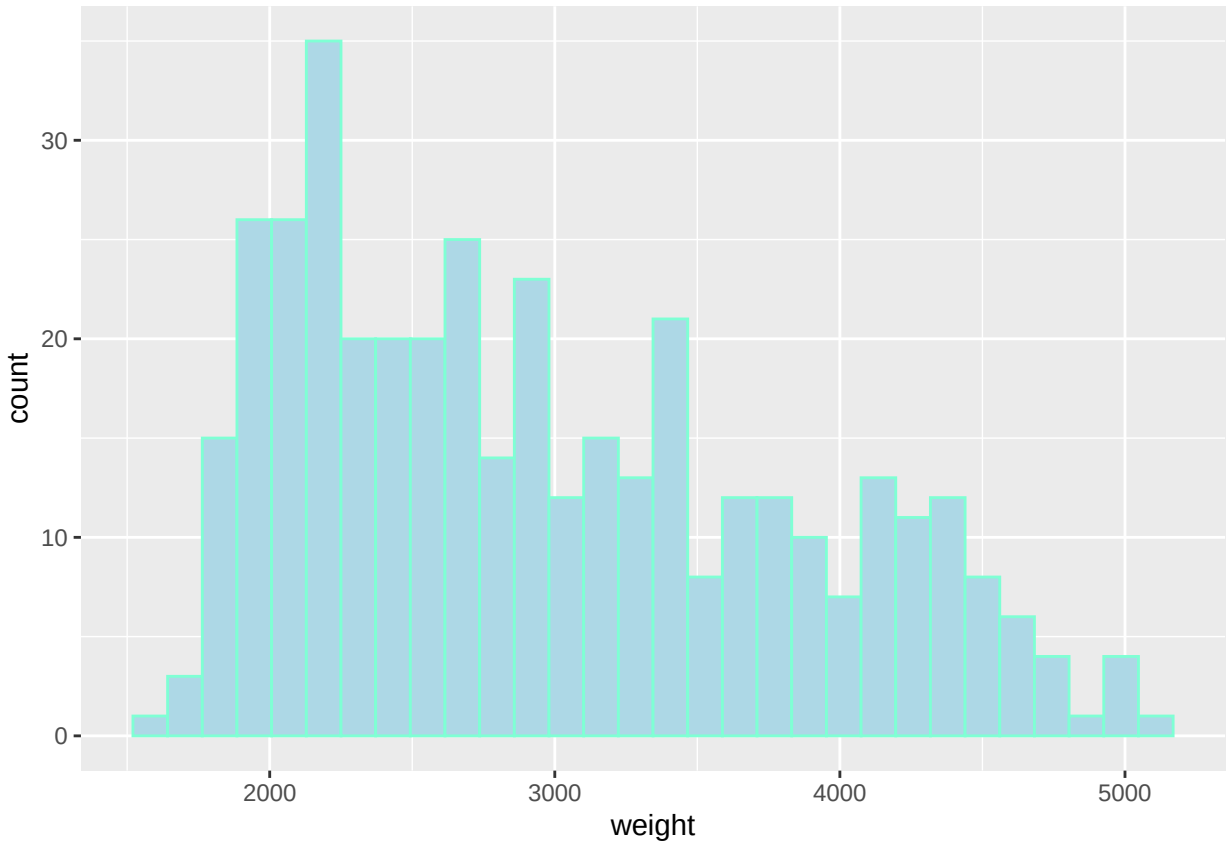
```
library(ggplot2)
library(tidyverse)
```

```
## -- Attaching packages --------------------------------------- tidyverse 1.3.2 --
## v tibble  3.1.8      v dplyr   1.0.10
## v tidyr   1.2.1      v stringr 1.4.1
## v readr   2.1.3      v forcats 0.5.2
## v purrr   0.3.5
## -- Conflicts ------------------------------------------ tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
```

```
cars <- read.csv("cars_multi.csv")
```

```
ggplot(data = cars) + geom_histogram(aes(x = weight),color = "aquamarine",fill="lightblue")
```

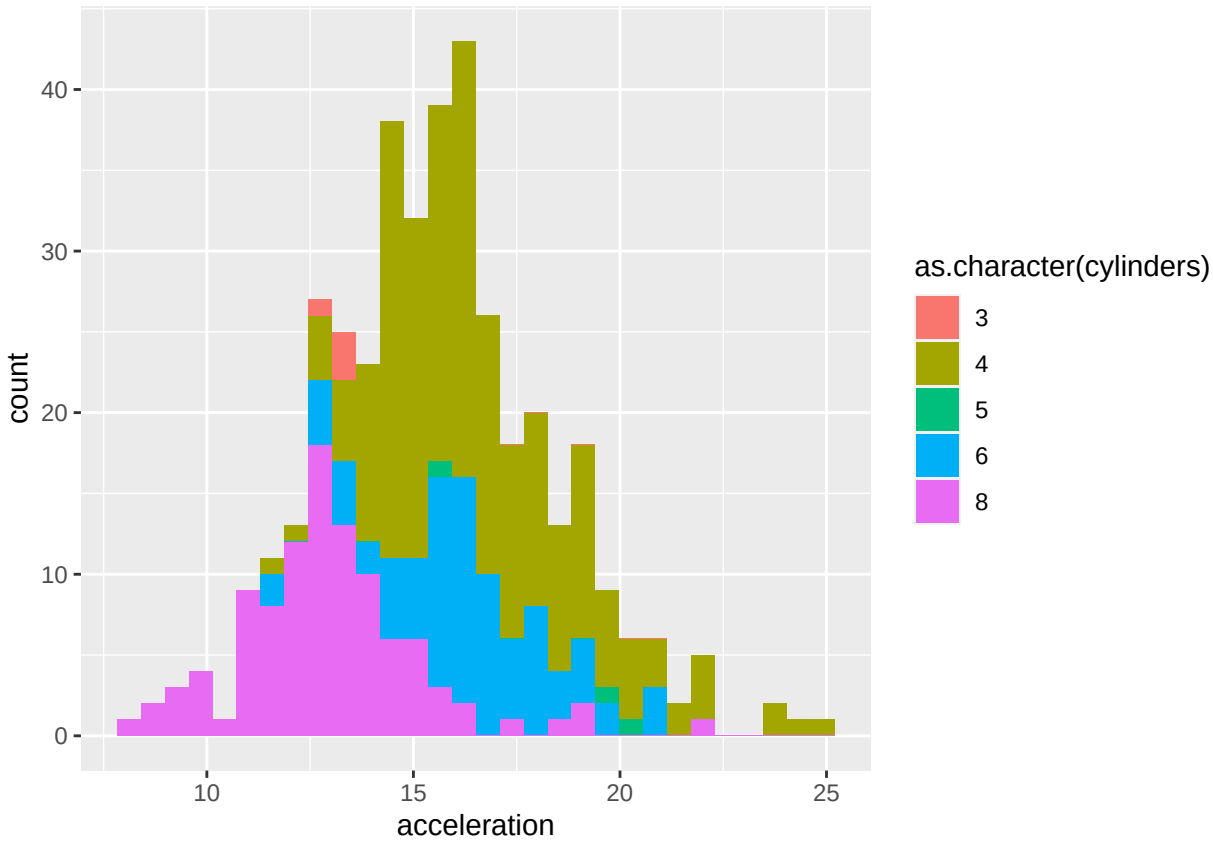
```
## `stat_bin()` using `bins = 30`. Pick better value with `binwidth`.
```



Question 2

```
ggplot(data = cars, aes(x = acceleration, fill = as.character(cylinders))) + geom_histogram()
```

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



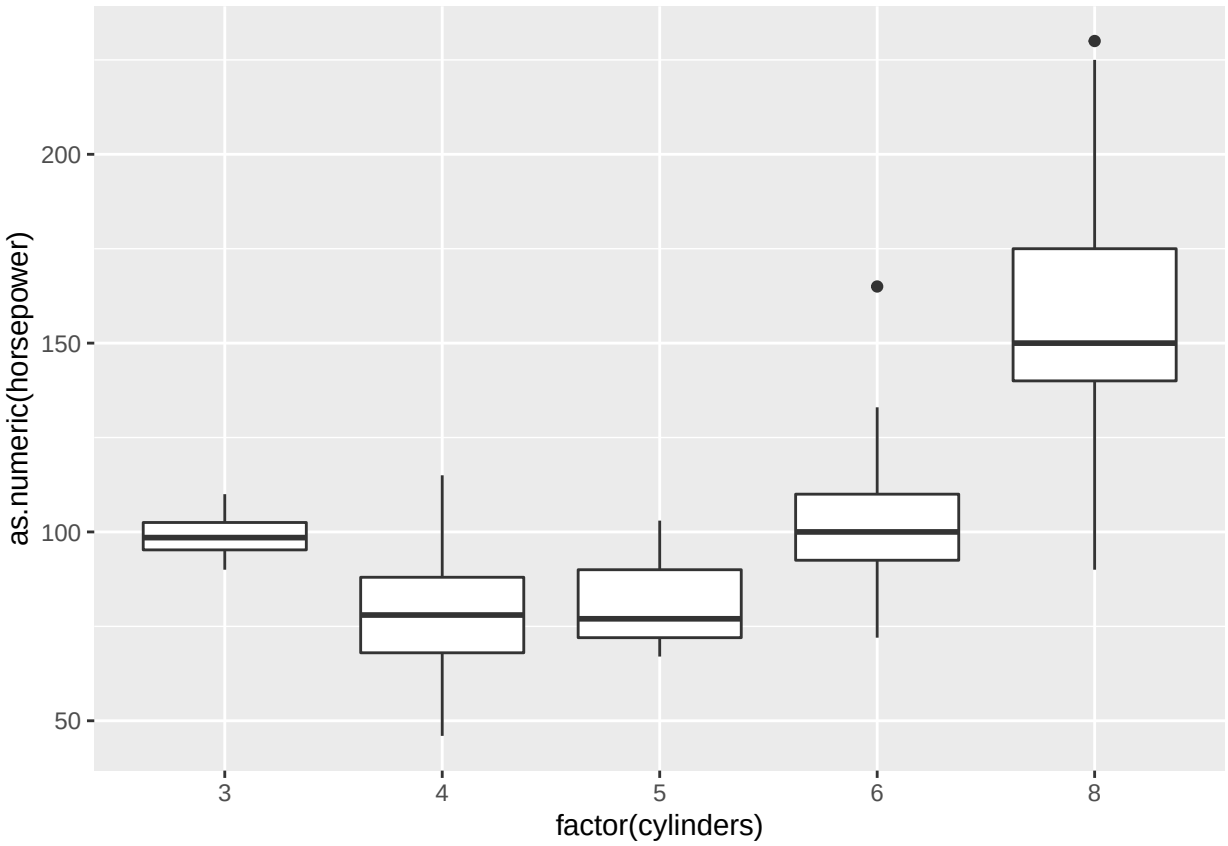
Question 3

```
ggplot(data = cars, aes(x = factor(cylinders), y = as.numeric(horsepower))) + geom_boxplot()
```

```
## Warning in FUN(X[[i]], ...): NAs introduced by coercion
```

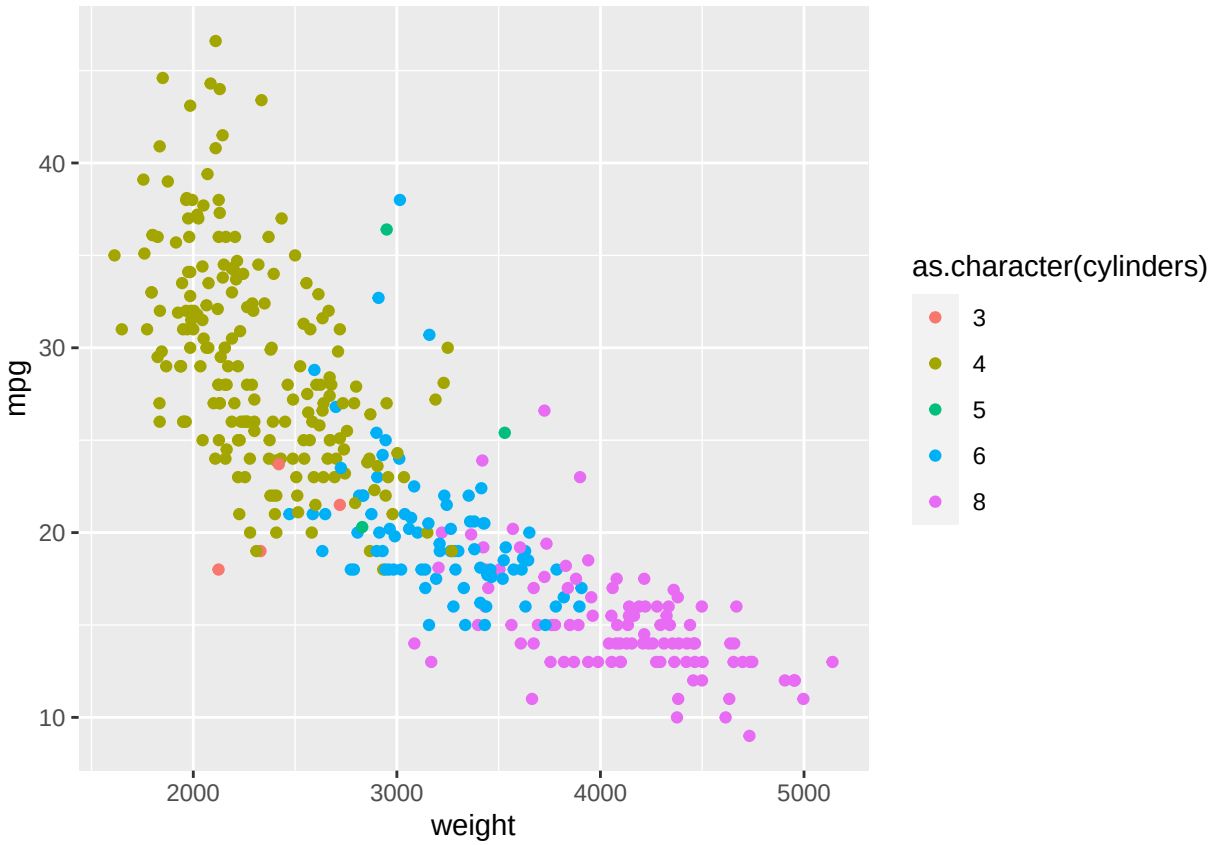
```
## Warning in FUN(X[[i]], ...): NAs introduced by coercion
```

```
## Warning: Removed 6 rows containing non-finite values (stat_boxplot).
```



Question 4

```
ggplot(data = cars, aes(y = mpg, x = weight, colour = as.character(cylinders))) + geom_point()
```



From the plot we can see that, the higher the weight the lower the mpg, the more the cylinders the less the mpg, the more the cylinders the higher the weight.