Homework R markdown

Pakorn Guide

2024-02-14

```
## # A tibble: 6 x 11
##   manufacturer model displ  year   cyl trans      drv     cty   hwy fl    class
##   <chr>        <chr> <dbl> <int> <int> <chr>      <chr> <int> <int> <chr> <chr>
## 1 audi         a4      1.8  1999     4 auto(l5)   f        18    29 p     compa~
## 2 audi         a4      1.8  1999     4 manual(m5) f        21    29 p     compa~
## 3 audi         a4      2    2008     4 manual(m6) f        20    31 p     compa~
## 4 audi         a4      2    2008     4 auto(av)   f        21    30 p     compa~
## 5 audi         a4      2.8  1999     6 auto(l5)   f        16    26 p     compa~
## 6 audi         a4      2.8  1999     6 manual(m5) f        18    26 p     compa~
```

Chart 1

```
ggplot(mpg , aes(class, fill = class)) +
  geom_bar() +
  theme_classic() +
  scale_fill_brewer( palette = "Set2")
```

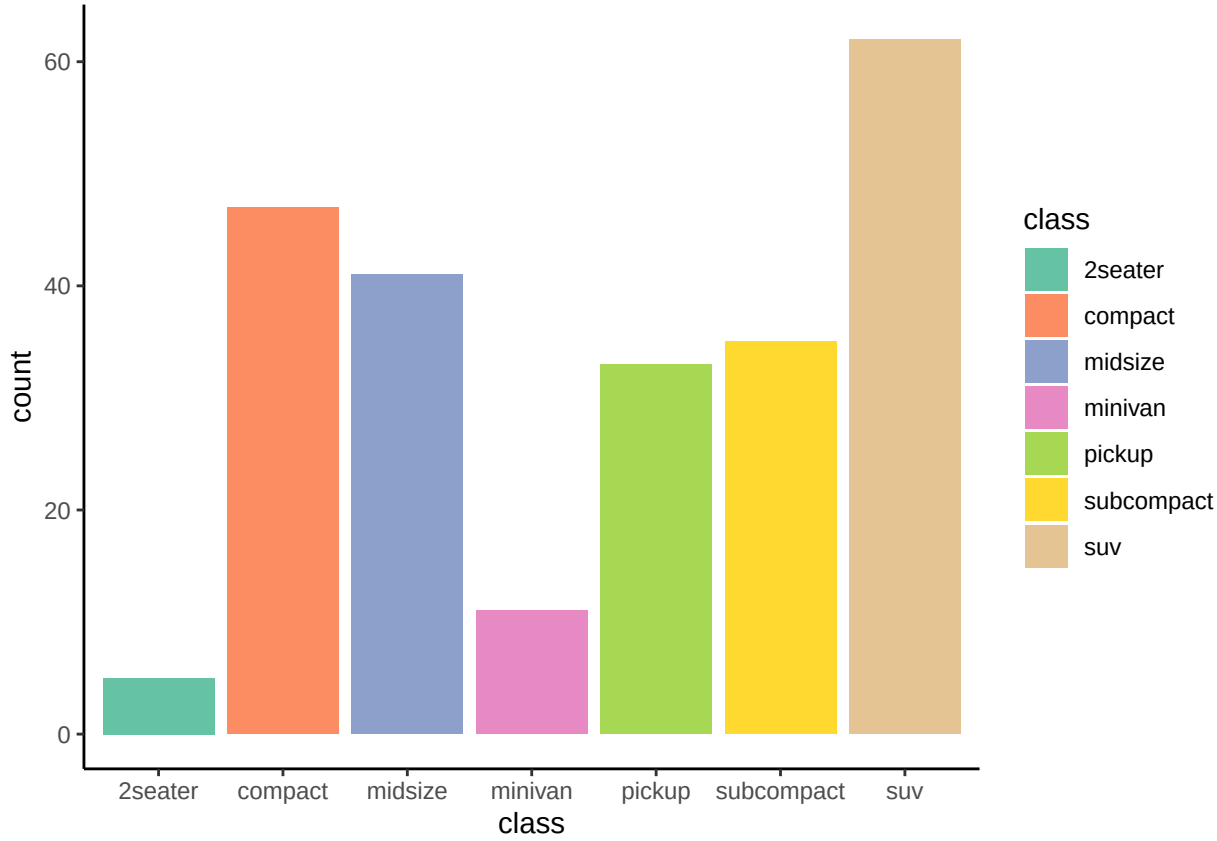


Chart 2

```
ggplot(mpg , aes(cty , hwy)) +
  theme_classic() +
  geom_point(alpha=0.4) +
  geom_smooth(method="loess" , se = TRUE , fill = "blue" , color = "orange") +
  geom_rug()
```

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

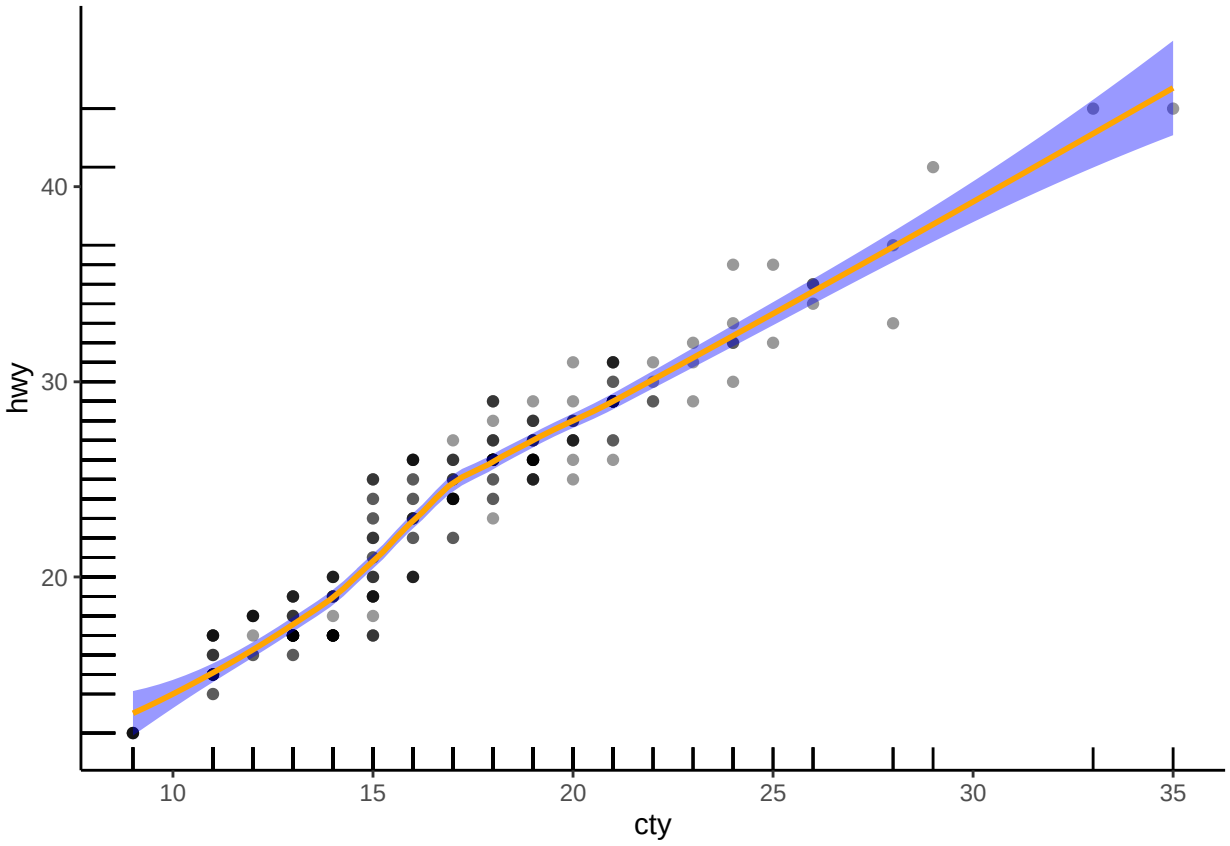


Chart 3

```
ggplot(mpg , aes (hwy)) +
  theme_minimal() +
  geom_histogram( bins =10 ) +
  facet_wrap( ~class, ncol= 3)
```

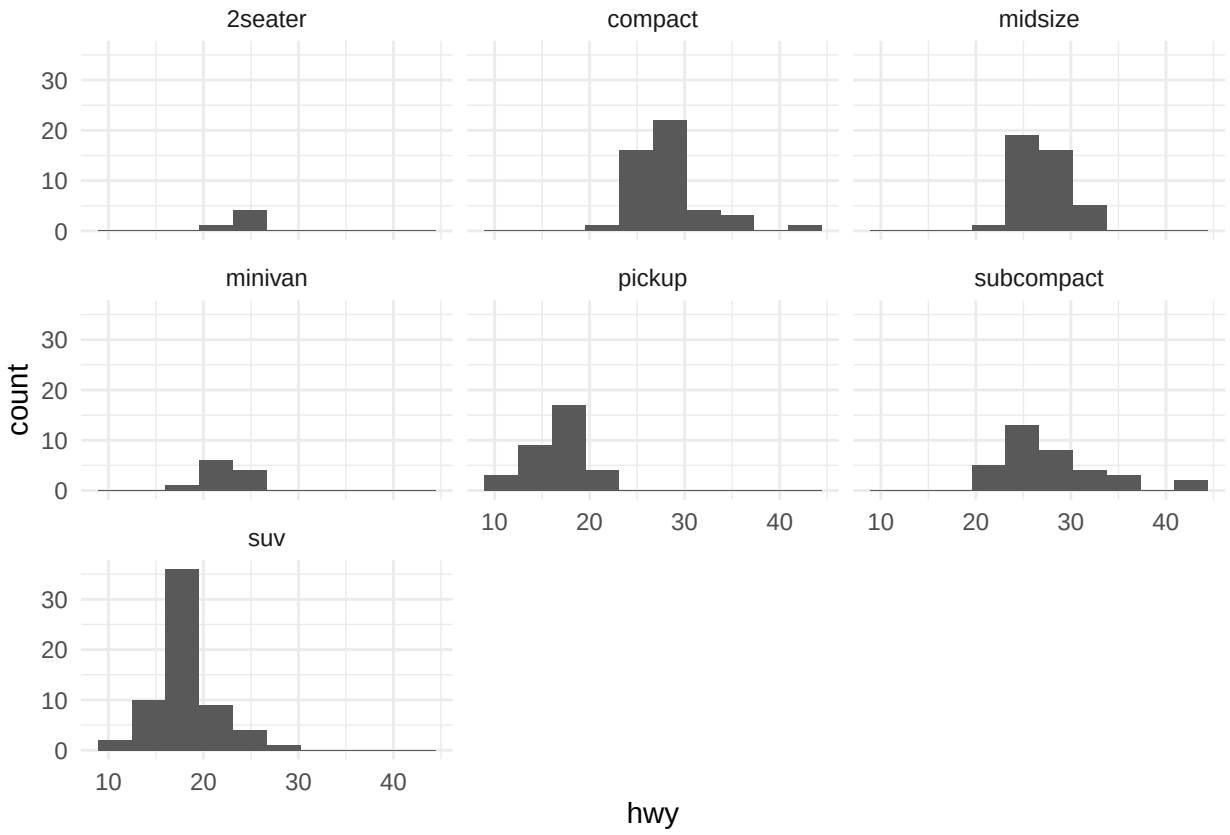


Chart 4

```
ggplot(mpg , aes(class , fill = fl)) +
  geom_bar( position = "dodge") +
  theme_classic()
```

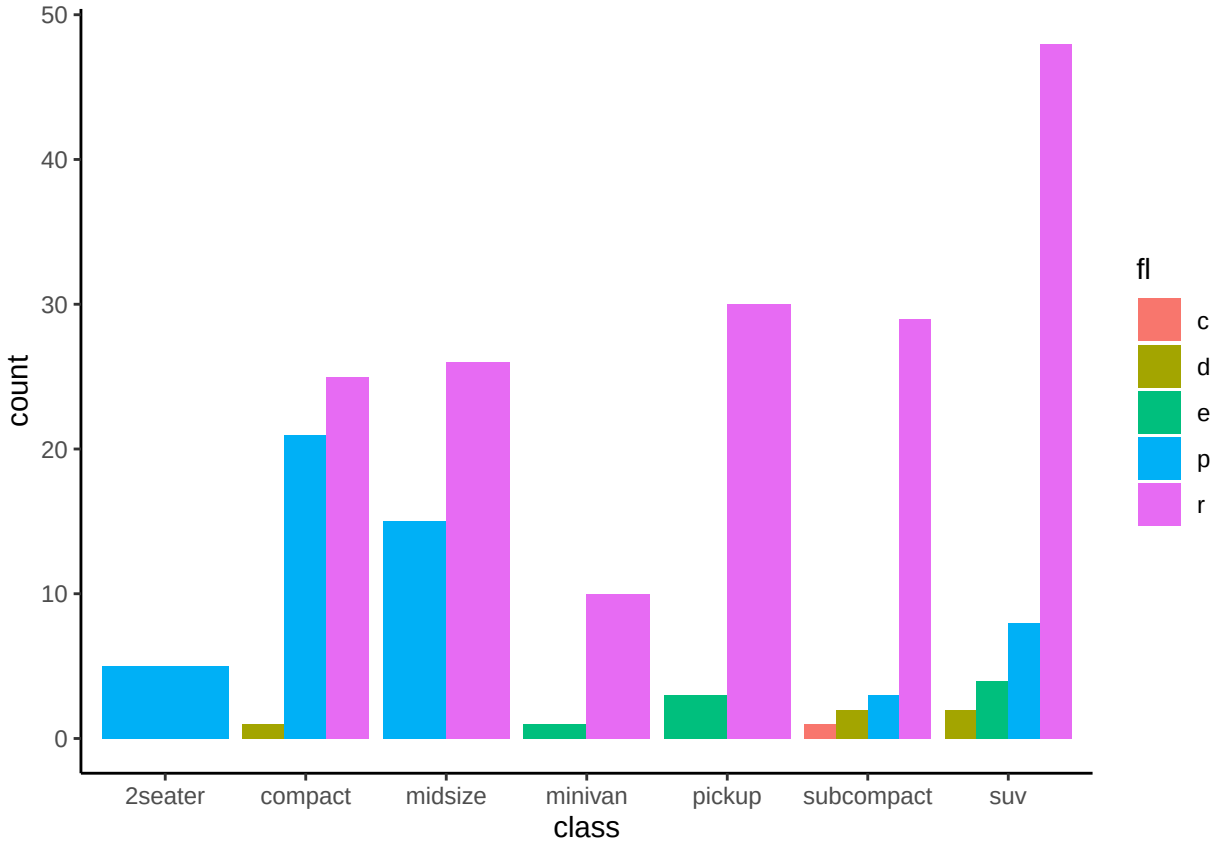
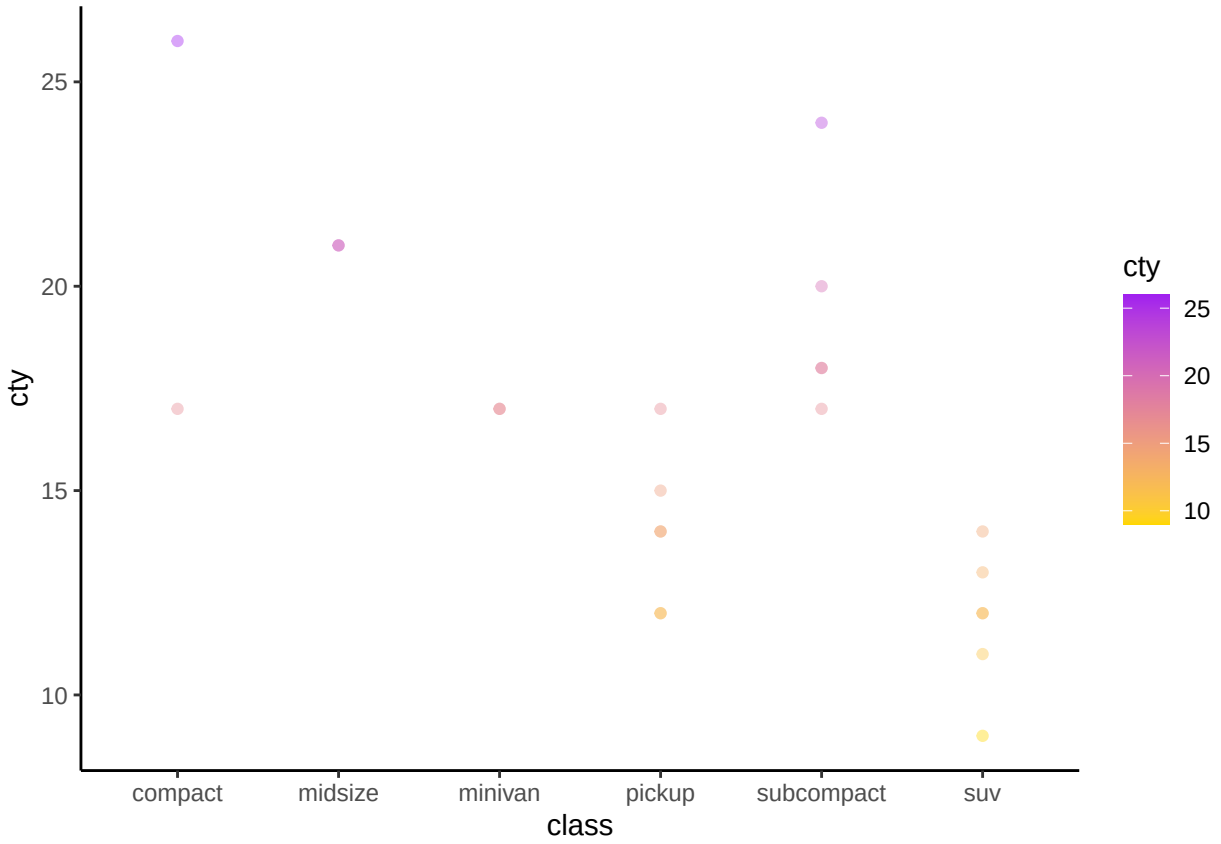


Chart 5

```
ggplot(mpg%>%
         sample_frac(0.1), aes(class , cty , color = cty)) +
  geom_point(alpha = 0.4) +
  theme_classic() +
  scale_color_gradient(low = "gold" , high = "purple" )
```


cty
25
20
15
10
compact
midsize
minivan
pickup
subcompact
suv
class
cty
25
20
15
10