Data Visualization Assignment

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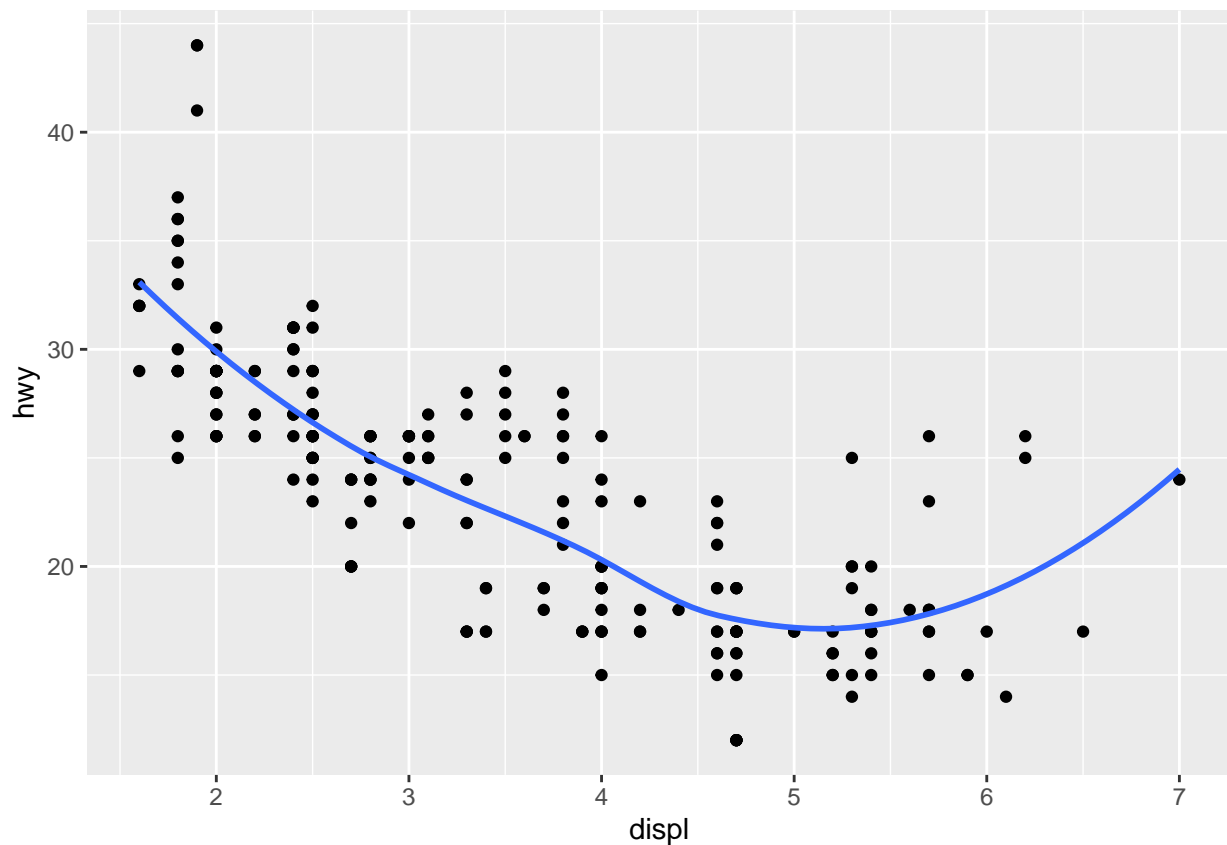
I know the questions say "use mtcars," but the variables don't line up with the graphs. I used the "mpg" dataset.

Recreate the graphs from the assignment

Graph 1

```
ggplot(data = mpg, mapping=aes(x=displ, y=hwy)) +
    geom_point() +
    geom_smooth(se = FALSE)
```
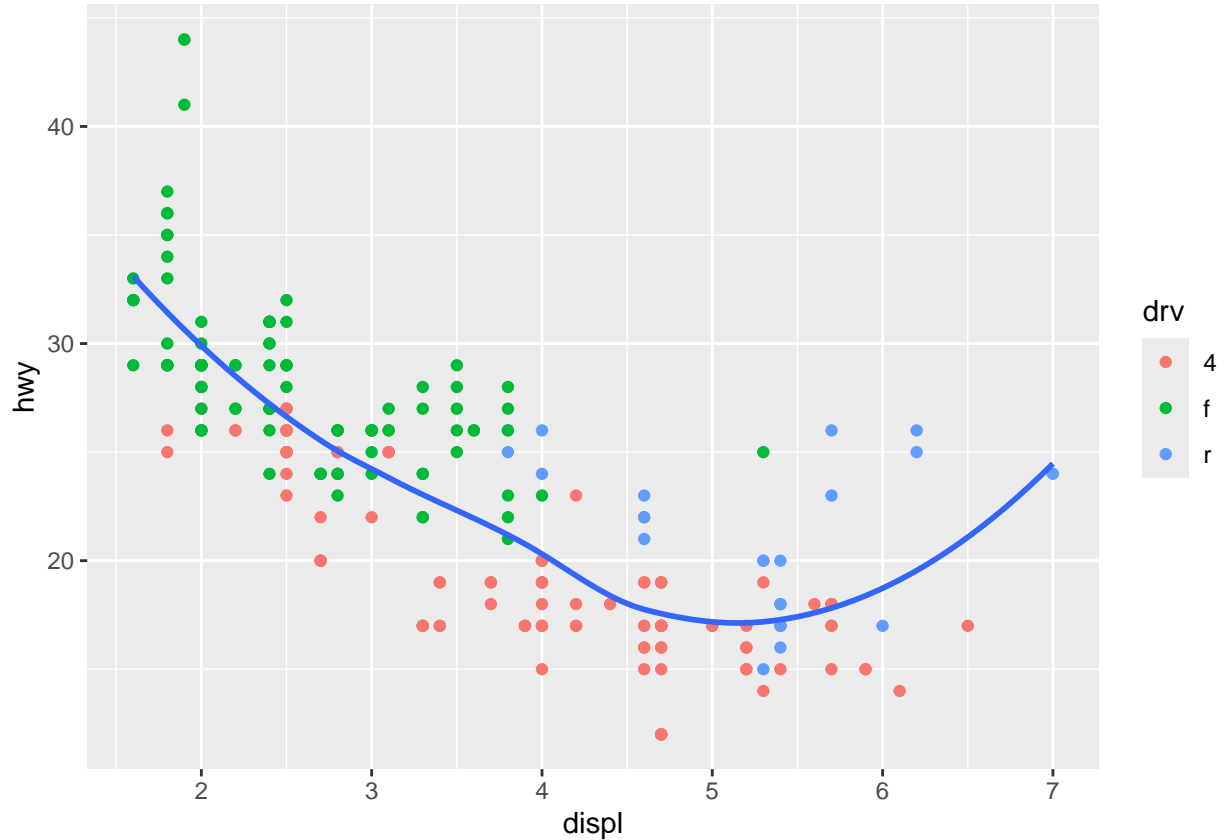
```
## 'geom_smooth()' using method = 'loess' and formula = 'y ~ x'
```

Graph 2

```
ggplot(data = mpg, mapping=aes(x=displ, y=hwy)) +
    geom_point(aes(color=drv)) +
    geom_smooth(se = FALSE)
```
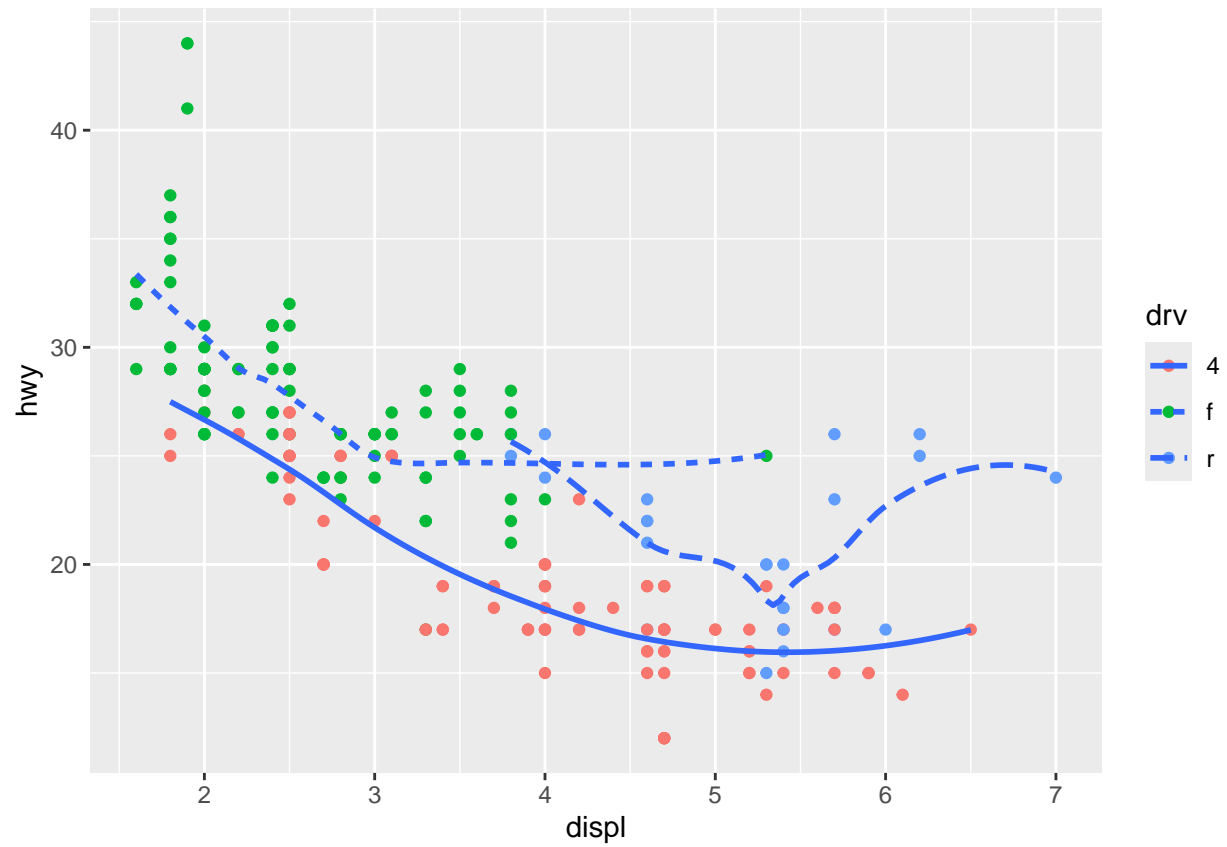
'geom_smooth()' using method = 'loess' and formula = 'y ~ x'
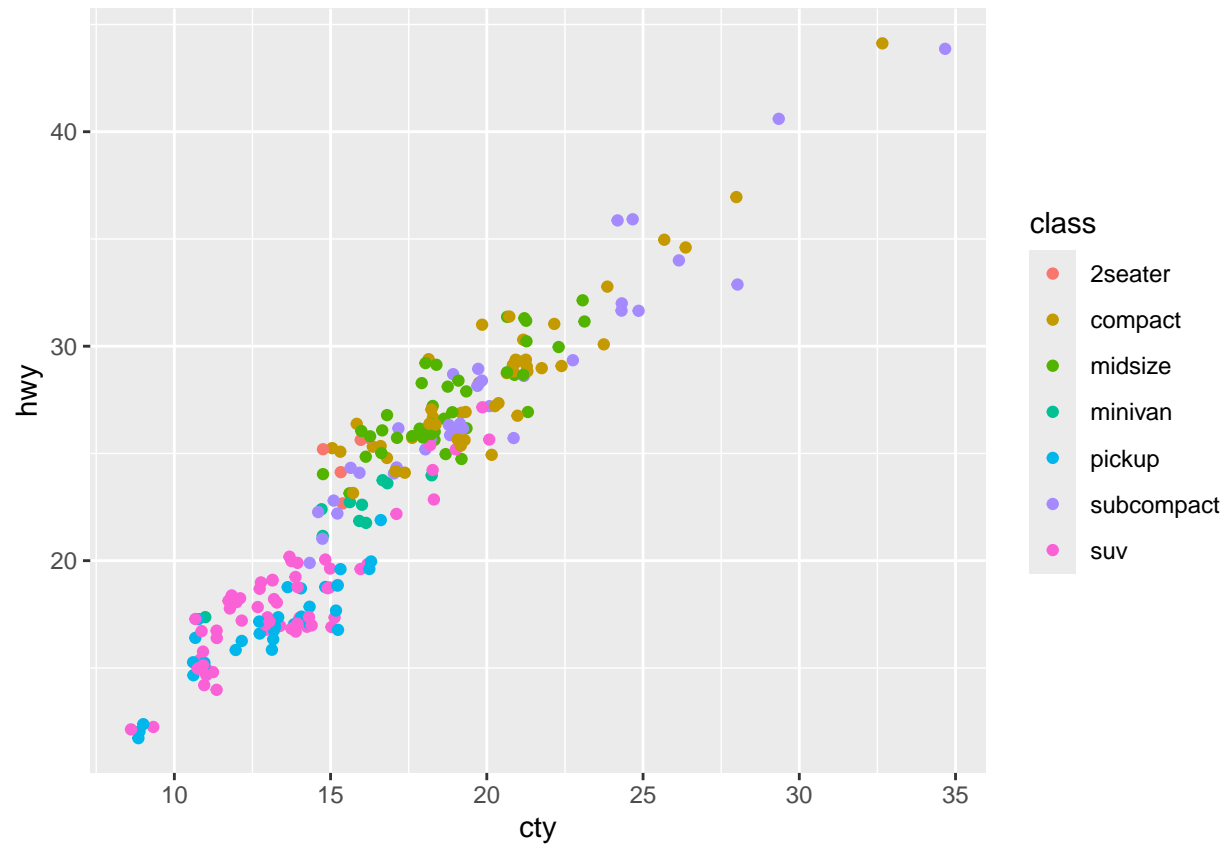

Graph 3

```
ggplot(data = mpg, mapping=aes(x=displ, y=hwy)) +
    geom_point(aes(color=drv)) +
    geom_smooth(aes(linetype=drv), se = FALSE)
```

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

2

Graph 4
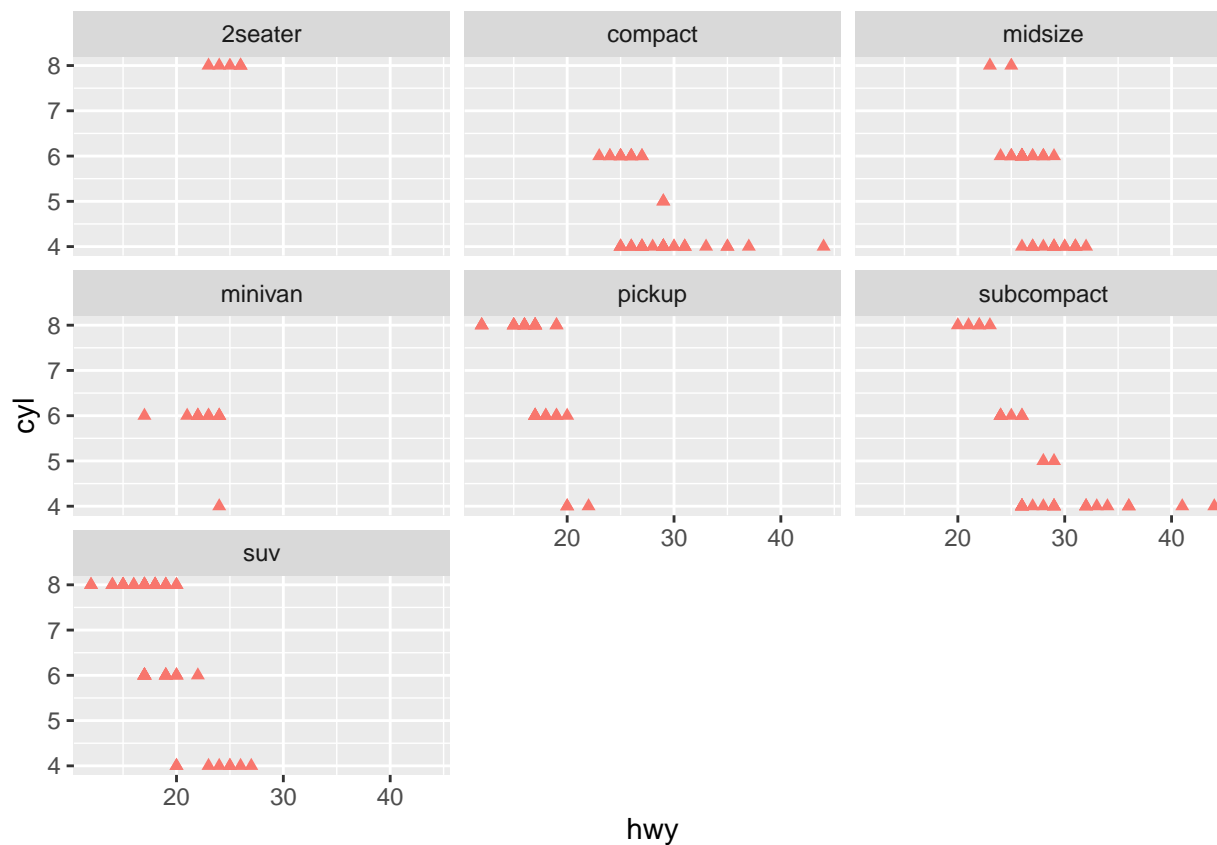
```
ggplot(data = mpg, mapping = aes(x=cty, y=hwy, color=class)) +
    geom_jitter()
```

Graph 5

```r
ggplot(mpg, mapping = aes(x=hwy, y=cyl, color="orange"), show.legend = FALSE) +
    geom_point(shape=17) +
    facet_wrap(~class) +
    theme(legend.position="none")
```

```r
sessionInfo()
```

SessionInfo()

```
## R version 4.4.2 (2024-10-31 ucrt)
## Platform: x86_64-w64-mingw32/x64
## Running under: Windows 11 x64 (build 26100)
##
## Matrix products: default
##
##
## locale:
## [1] LC_COLLATE=English_United States.utf8
## [2] LC_CTYPE=English_United States.utf8
## [3] LC_MONETARY=English_United States.utf8
## [4] LC_NUMERIC=C
## [5] LC_TIME=English_United States.utf8
##
## time zone: America/Los_Angeles
## tzcode source: internal
##
## attached base packages:
## [1] stats     graphics  grDevices utils     datasets  methods   base
```

```
##
## other attached packages:
##  [1] lubridate_1.9.4 forcats_1.0.0   stringr_1.5.1   dplyr_1.1.4
##  [5] purrr_1.0.4     readr_2.1.5     tidyr_1.3.1     tibble_3.2.1
##  [9] ggplot2_3.5.1   tidyverse_2.0.0
##
## loaded via a namespace (and not attached):
##  [1] Matrix_1.7-1     gtable_0.3.6     compiler_4.4.2   tidyselect_1.2.1
##  [5] splines_4.4.2    scales_1.3.0     yaml_2.3.10      fastmap_1.2.0
##  [9] lattice_0.22-6   R6_2.5.1         labeling_0.4.3   generics_0.1.3
## [13] knitr_1.49       munsell_0.5.1    pillar_1.9.0     tzdb_0.4.0
## [17] rlang_1.1.4      utf8_1.2.4       stringi_1.8.4    xfun_0.49
## [21] timechange_0.3.0 cli_3.6.3        mgcv_1.9-1       withr_3.0.2
## [25] magrittr_2.0.3   digest_0.6.37    grid_4.4.2       rstudioapi_0.17.1
## [29] hms_1.1.3        nlme_3.1-166     lifecycle_1.0.4  vctrs_0.6.5
## [33] evaluate_1.0.1   glue_1.8.0       farver_2.1.2     fansi_1.0.6
## [37] colorspace_2.1-1 rmarkdown_2.29   tools_4.4.2      pkgconfig_2.0.3
## [41] htmltools_0.5.8.1
```