

# Lecture Assignment 5

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## 4.4 Exercises 1-3

1)

The reason why there is an error in the code is because the `i` in the second `my_variable` is not actually an `i`. A fixed version of the code should look like this...

```
my_variable <- 10
my_variable
```

```
## [1] 10
```

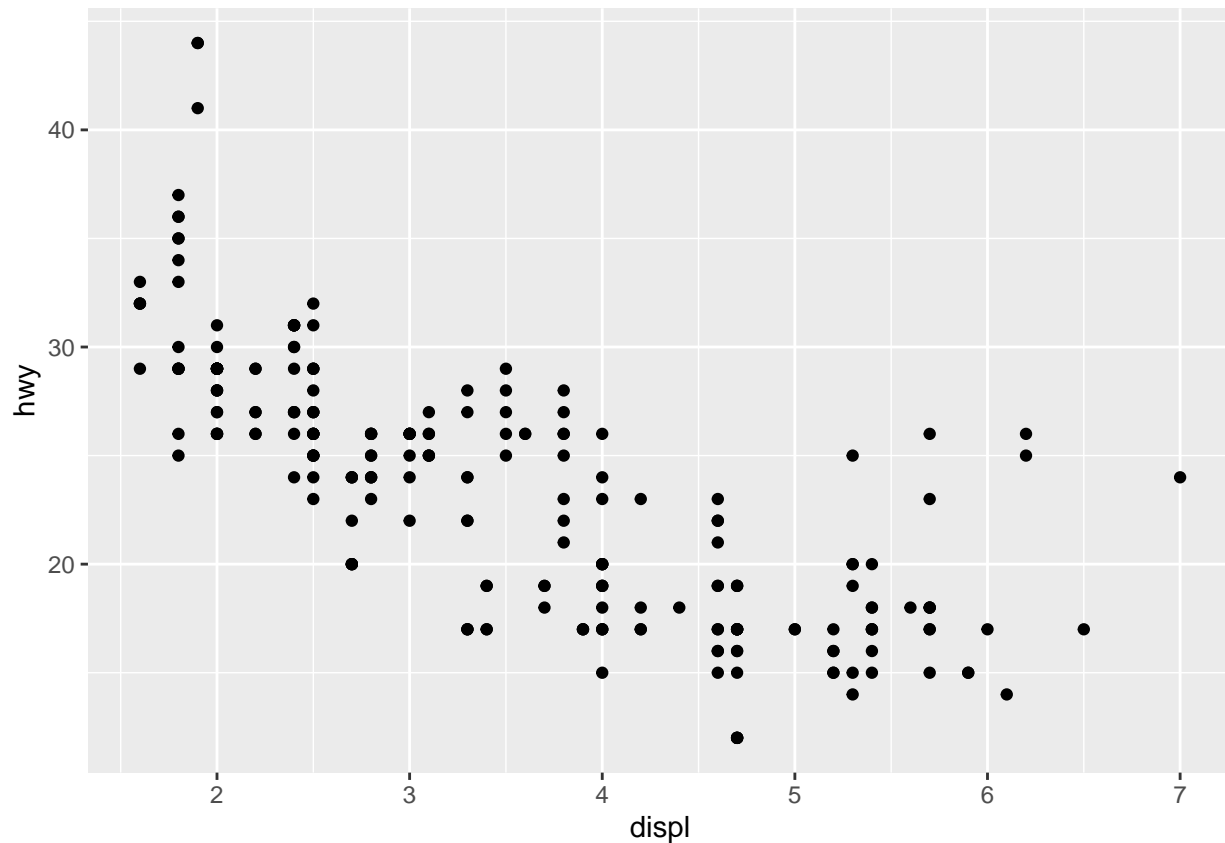
2)

Here is the modified and correct version of the original code provided.

```
library(tidyverse)
```

```
## -- Attaching core tidyverse packages ----- tidyverse 2.0.0 --
## v dplyr      1.1.4      v readr      2.1.5
## v forcats    1.0.0      v stringr   1.5.1
## v ggplot2    3.5.0      v tibble    3.2.1
## v lubridate  1.9.3      v tidyr     1.3.1
## v purrr      1.0.2
## -- Conflicts ----- tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()     masks stats::lag()
## i Use the conflicted package (<http://conflicted.r-lib.org/>) to force all conflicts to become errors
```

```
ggplot(data = mpg) + # dota to data
  geom_point(mapping = aes(x = displ, y = hwy))
```



```
filter(mpg, cyl == 8) # fliter to filter and cyl = 8 to cyl == 8
```

```
## # A tibble: 70 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          a6 quattro   4.2   2008     8 auto~ 4      16    23 p      mids~
## 2 chevrolet     c1500 sub~   5.3   2008     8 auto~ r      14    20 r      suv
## 3 chevrolet     c1500 sub~   5.3   2008     8 auto~ r      11    15 e      suv
## 4 chevrolet     c1500 sub~   5.3   2008     8 auto~ r      14    20 r      suv
## 5 chevrolet     c1500 sub~   5.7   1999     8 auto~ r      13    17 r      suv
## 6 chevrolet     c1500 sub~   6     2008     8 auto~ r      12    17 r      suv
## 7 chevrolet     corvette   5.7   1999     8 manu~ r      16    26 p      2sea~
## 8 chevrolet     corvette   5.7   1999     8 auto~ r      15    23 p      2sea~
## 9 chevrolet     corvette   6.2   2008     8 manu~ r      16    26 p      2sea~
## 10 chevrolet    corvette   6.2   2008     8 auto~ r      15    25 p      2sea~
## # i 60 more rows
```

```
filter(diamonds, carat > 3) # diamond to diamonds
```

```
## # A tibble: 32 x 10
##   carat cut      color clarity depth table price      x      y      z
##   <dbl> <ord>    <ord> <ord>    <dbl> <dbl> <int> <dbl> <dbl> <dbl>
## 1  3.01 Premium I      I1      62.7   58  8040  9.1   8.97  5.67
## 2  3.11 Fair    J      I1      65.9   57  9823  9.15  9.02  5.98
## 3  3.01 Premium F      I1      62.2   56  9925  9.24  9.13  5.73
```

```
## 4 3.05 Premium E I1 60.9 58 10453 9.26 9.25 5.66
## 5 3.02 Fair I I1 65.2 56 10577 9.11 9.02 5.91
## 6 3.01 Fair H I1 56.1 62 10761 9.54 9.38 5.31
## 7 3.65 Fair H I1 67.1 53 11668 9.53 9.48 6.38
## 8 3.24 Premium H I1 62.1 58 12300 9.44 9.4 5.85
## 9 3.22 Ideal I I1 62.6 55 12545 9.49 9.42 5.92
## 10 3.5 Ideal H I1 62.8 57 12587 9.65 9.59 6.03
## # i 22 more rows
```

3)

What I see are all the different keyboard shortcuts you can use in the studio.

To navigate to the same screen, click on “Tools” at the top, then click on “Keyboard Shortcuts Help”.

## 11.2.2 Exercises 1-3

1)

You would use the `read_delim()` function with the argument `delim = “|”`. It would look something like this...

```
read_delim("a|b|c\n1|2|3\n4|5|6", delim = "|")
```

```
## Rows: 2 Columns: 3
## -- Column specification -----
## Delimiter: "|"
## dbl (3): a, b, c
##
## i Use 'spec()' to retrieve the full column specification for this data.
## i Specify the column types or set 'show_col_types = FALSE' to quiet this message.

## # A tibble: 2 x 3
##       a     b     c
##   <dbl> <dbl> <dbl>
## 1     1     2     3
## 2     4     5     6
```

2)

All of the arguments. This is because both the functions `read_csv()` and `read_tsv()` use `read_delim` as the function doing the work. Both functions just call `read_delim` with a set of predefined options for csv and tsv formats using `tokenize_*` functions. The `tokenize_*` functions simply returns a list with the characteristics of each format.

3)

The most important argument is `col_positions` which defines the column positions. We use `col_positions` to determine the width at which each column is separated. You can determine the width with the `fwf_*` helper functions.