

Sarah__Widener__HW5.Rmd

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#Using the R example data “mtcars”, do the following (when possible, try using the options available on the tidyverse package): #1) Sort the dataset based on the variables “cyl” and “gear” (a single step, cyl is the first variable to be sorted and gear the second one).

```
data(mtcars)
str(mtcars)
library(tidyverse)
sortedmtcars <- arrange(mtcars, cyl, gear)
```

2) Create a variable called “model” with the names of the rows of this dataset.

```
mtcars_model <- rownames_to_column (sortedmtcars, var = "model")
```

3) Replace the space of all the models by “_” (e.g., replace “Toyota Corona” by “Toyota_Corona”).

```
mtcars_model = gsub(" ", "_", mtcars_model)
```

4) Create two datasets, one with mpg_low (by selecting cars with MPG less than 20) and mpg_high (by selecting cars with MPG greater than or equal 20)

```
mpg_low <- filter(mtcars, mpg < 20)
mpg_high <- filter(mtcars, mpg >= 20)
```

5) Using the pipe (`%>%`) command do all of these steps onto the `mtcars` dataset: sort by “hp”, remove all columns different than “cyl”, “hp”, “model”, and “gear”, create a new variable named “new_variable” that is the multiplication of “cyl” x “gear”.

```
mtcars %>%  
  arrange(desc(hp)) %>%  
  select(cyl, hp, mtcars_model, gear) %>%  
  mutate(new_variable = cyl * gear)
```