tasks for chapter 2

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Task

1. Make sure to have the `mpg` dataset loaded by typing `data(mpg)` (and `library(ggplot2)` if you haven't!). Use the `table` function to find out how many cars were built by *mercury*? `table(mpg$manufacturer)`, 4.
2. What is the average year the audi's were built in this dataset? Use the function `mean` on the subset of column `year` that corresponds to `audi`. (Be careful: subsetting a `tibble` returns a `tibble` (and not a vector)!. so get the `year` column after you have subset the `tibble`.) `mean(subset(mpg,subset=manufacturer=="audi")$year)`, `mean(mpg[mpg$manufacturer=="audi","year"]$year)`
3. Use the `dplyr` piping syntax from above first with `group_by` and then with `summarise(newvar=your_expression)` to find the mean `year` by manufacturer!

```
library(ggplot2)
library(dplyr)
```

```
##
## Attaching package: 'dplyr'
```

```
## The following objects are masked from 'package:stats':
##
##     filter, lag
```

```
## The following objects are masked from 'package:base':
##
##     intersect, setdiff, setequal, union
```

```
mpg %>%
  group_by(manufacturer) %>%
  summarise(year=mean(year))
```

```
## # A tibble: 15 x 2
##    manufacturer  year
##    <chr>        <dbl>
##  1 audi         2004.
##  2 chevrolet    2005.
##  3 dodge        2004.
##  4 ford         2003.
##  5 honda        2003
##  6 hyundai      2004.
##  7 jeep         2006.
##  8 land rover   2004.
##  9 lincoln      2002
## 10 mercury      2004.
## 11 nissan       2004.
## 12 pontiac      2003.
## 13 subaru       2004.
## 14 toyota       2003.
## 15 volkswagen   2003.
```