1. Load the `fivethirtyeight` package, and read in the data set named `bechdel`.

```
library(fivethirtyeight)
data(bechdel)
```

```
## # A tibble: 6 x 15
##    year imdb  title test  clean_test binary budget domgross intgross code
##   <int> <chr> <chr> <chr> <ord>      <chr>   <int>    <dbl>    <dbl> <chr>
## 1  2013 tt17~ 21 &~ nota~ notalk     FAIL   1.30e7 25682380   4.22e7 2013~
## 2  2012 tt13~ Dred~ ok-d~ ok         PASS   4.50e7 13414714   4.09e7 2012~
## 3  2013 tt20~ 12 Y~ nota~ notalk     FAIL   2.00e7 53107035   1.59e8 2013~
## 4  2013 tt12~ 2 Gu~ nota~ notalk     FAIL   6.10e7 75612460   1.32e8 2013~
## 5  2013 tt04~ 42    men   men        FAIL   4.00e7 95020213   9.50e7 2013~
## 6  2013 tt13~ 47 R~ men   men        FAIL   2.25e8 38362475   1.46e8 2013~
## # ... with 5 more variables: budget_2013 <int>, domgross_2013 <dbl>,
## #   intgross_2013 <dbl>, period_code <int>, decade_code <int>
```

2. Display a quick summary of the `bechdel` data.

```
skim(bechdel)
```

3. Calculate the number of cases in the data.

```
bechdel %>%
  count()
```

4. Make a new variable, `gross_prop`, which is the ratio of `domgross` and `intgross`

```
bechdel %>%
  mutate(gross_prop = domgross/intgross)
```

5. Calculate the mean `domgross` for all movies

```
bechdel %>%
  summarize(mean(domgross))
```

6. Calculate the mean `domgross` separately for movies that passed and failed the test

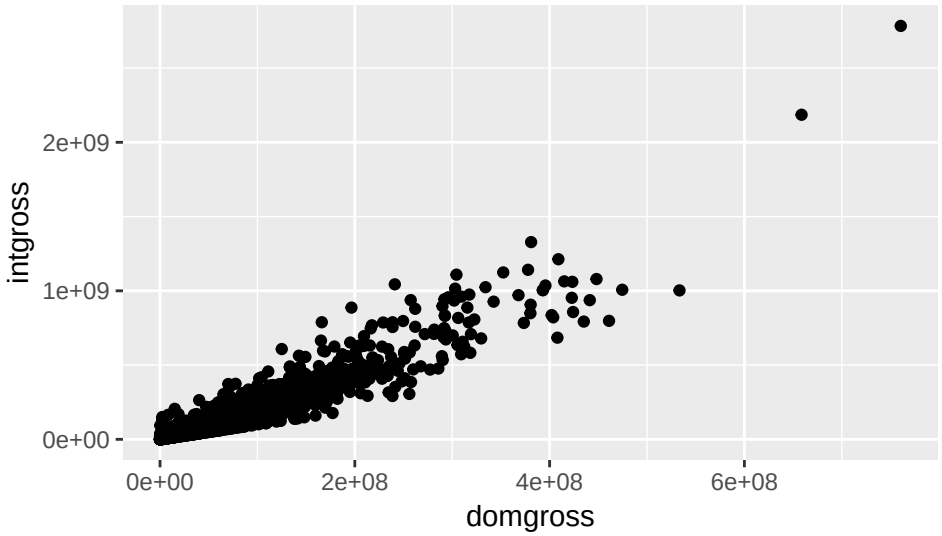
```
bechdel %>%
  group_by(binary) %>%
  summarize(mean(domgross))
```

7. Make a new dataset called `passed`, which is only the movies that passed the test

```
passed <- bechdel %>%
  filter(binary == TRUE)
```

8. Make a scatterplot of `domgross` versus `intgross`:

```
ggplot(bechdel) +
  geom_point(aes(x=domgross, y=intgross))
```



9. Make scatterplots of `domgross` versus `intgross` for each category of `clean_test`

```
ggplot(bechdel) +
  geom_point(aes(x=domgross, y=intgross)) +
  facet_wrap(.~clean_test)
```