Assignment-5

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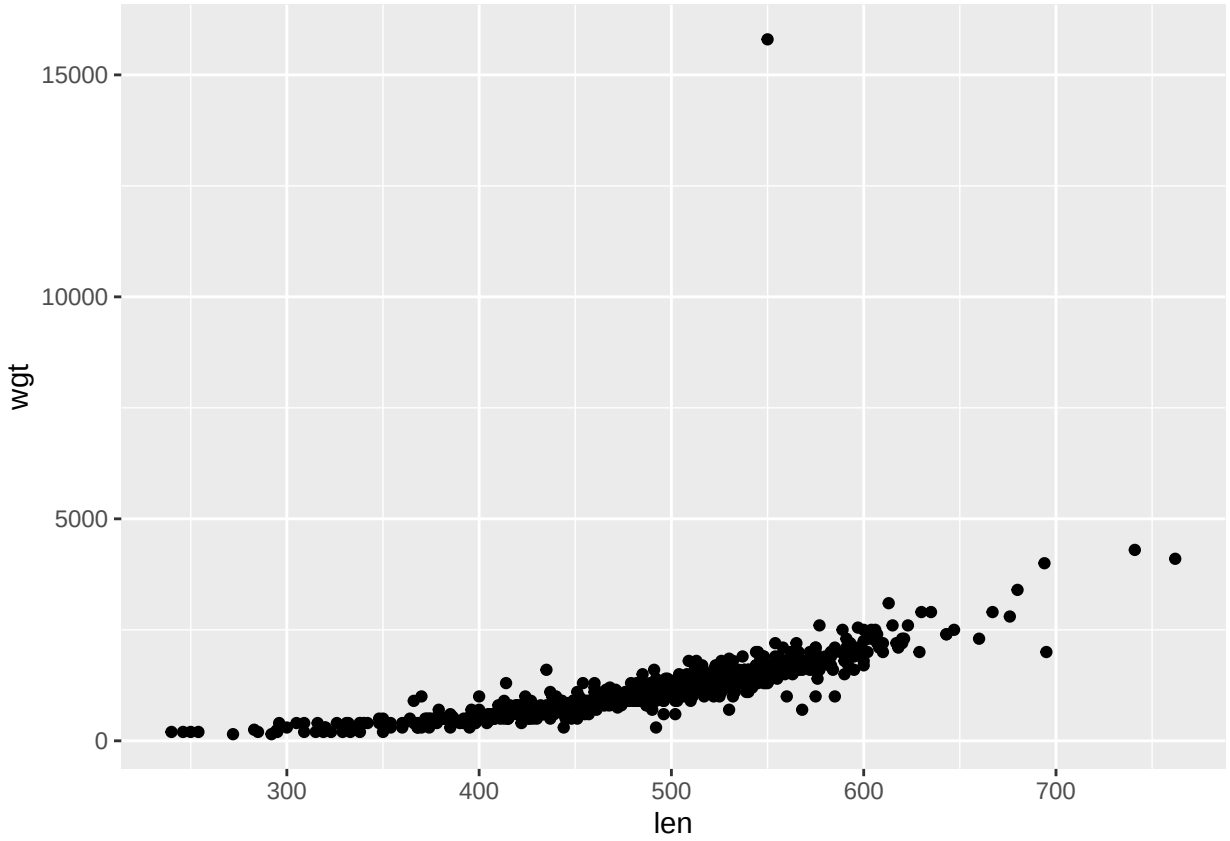
Load information

```
# load library
library(FSAdata)
library(tidyverse)
library(here)


# load in data
rawdata <- read_csv(here("data", "siscowet.csv"))
```

Clean data

```
# initial plot
rawdata %>%
  ggplot(aes(x = len,
             y = wgt)) +
  geom_point()
```

```
## Warning: Removed 1 rows containing missing values (`geom_point()`).
```




```
dev.off()
```

```
## null device
##           1
```

```
# identify outlier and remove
which(rawdata$wgt >= 15000)
```

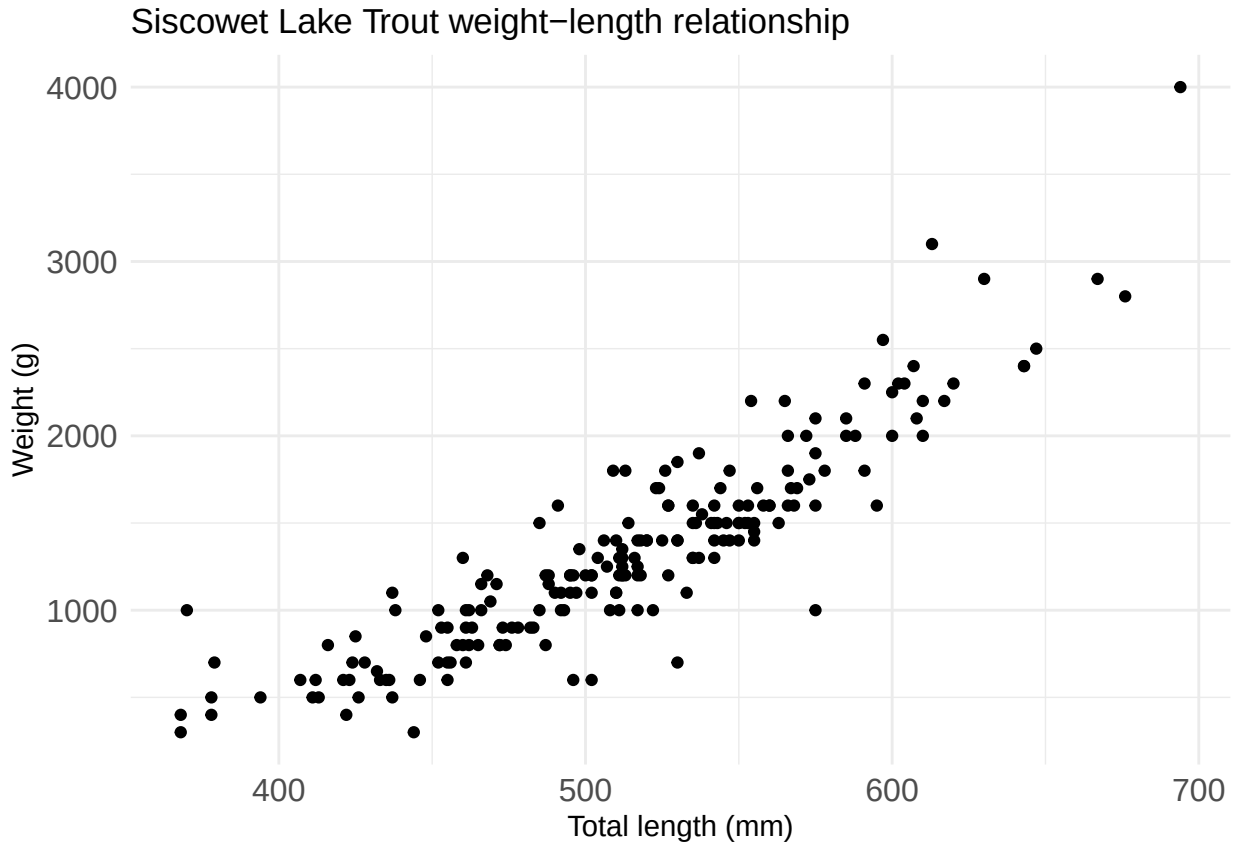
```
## [1] 541
```

```
cleandata <- rawdata %>%
  filter(!row_number() %in% 541)

# identify NAs and remove
cleandata <- cleandata %>%
  drop_na()
```

Exploratory graph

```
# new plot attempt
explor <- cleandata %>%
  ggplot(aes(x = len,
```

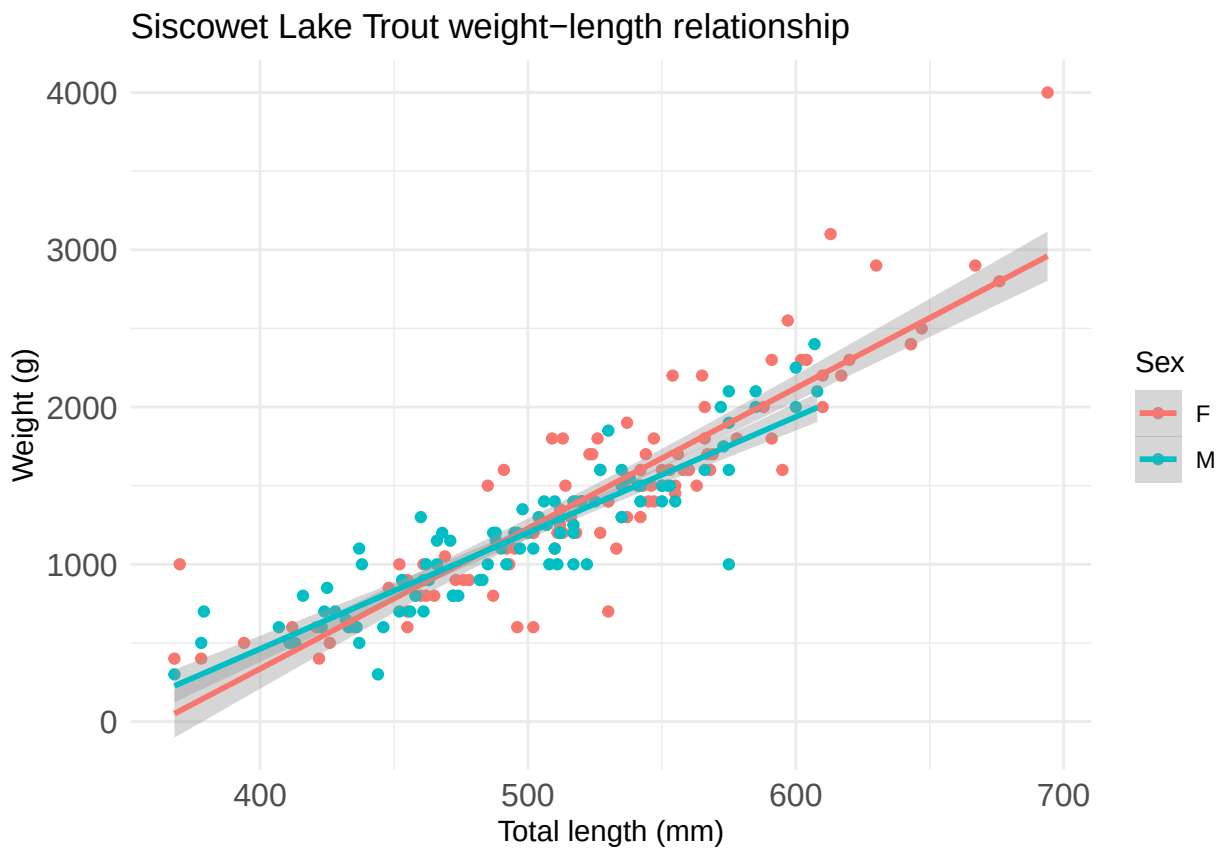
```
            y = wgt)) +
  geom_point() +
  theme_minimal() +
  xlab("Total length (mm)") +
  ylab("Weight (g)") +
  theme(axis.text = element_text(size = 12)) +
  labs(title = "Siscowet Lake Trout weight-length relationship")

explor
```



Expository graph

```
exposi <- cleandata %>%
  ggplot(aes(x = len,
             y = wgt,
             color = sex)) +
  geom_point() +
  theme_minimal() +
  xlab("Total length (mm)") +
  ylab("Weight (g)") +
  theme(axis.text = element_text(size = 12)) +
  labs(color = "Sex",
       title = "Siscowet Lake Trout weight-length relationship") +
```

```
  geom_smooth(method = "lm", formula = y~x)

exposi
```




```
pdf("figures/explor.pdf")
explor
dev.off()
```

```
## pdf
##   2
```

```
pdf("figures/exposi.pdf")
exposi
dev.off()
```

```
## pdf
##   2
```