

Assignment 5

Your Name and Surname

2025-11-10

```
install.packages("ggplot2")

## Installing package into '/cloud/lib/x86_64-pc-linux-gnu-library/4.5'
## (as 'lib' is unspecified)

install.packages("dplyr")

## Installing package into '/cloud/lib/x86_64-pc-linux-gnu-library/4.5'
## (as 'lib' is unspecified)

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

install.packages("GGally")

## Installing package into '/cloud/lib/x86_64-pc-linux-gnu-library/4.5'
## (as 'lib' is unspecified)

library("GGally")

install.packages("ellipse")

## Installing package into '/cloud/lib/x86_64-pc-linux-gnu-library/4.5'
## (as 'lib' is unspecified)

library(ellipse)

##
## Attaching package: 'ellipse'

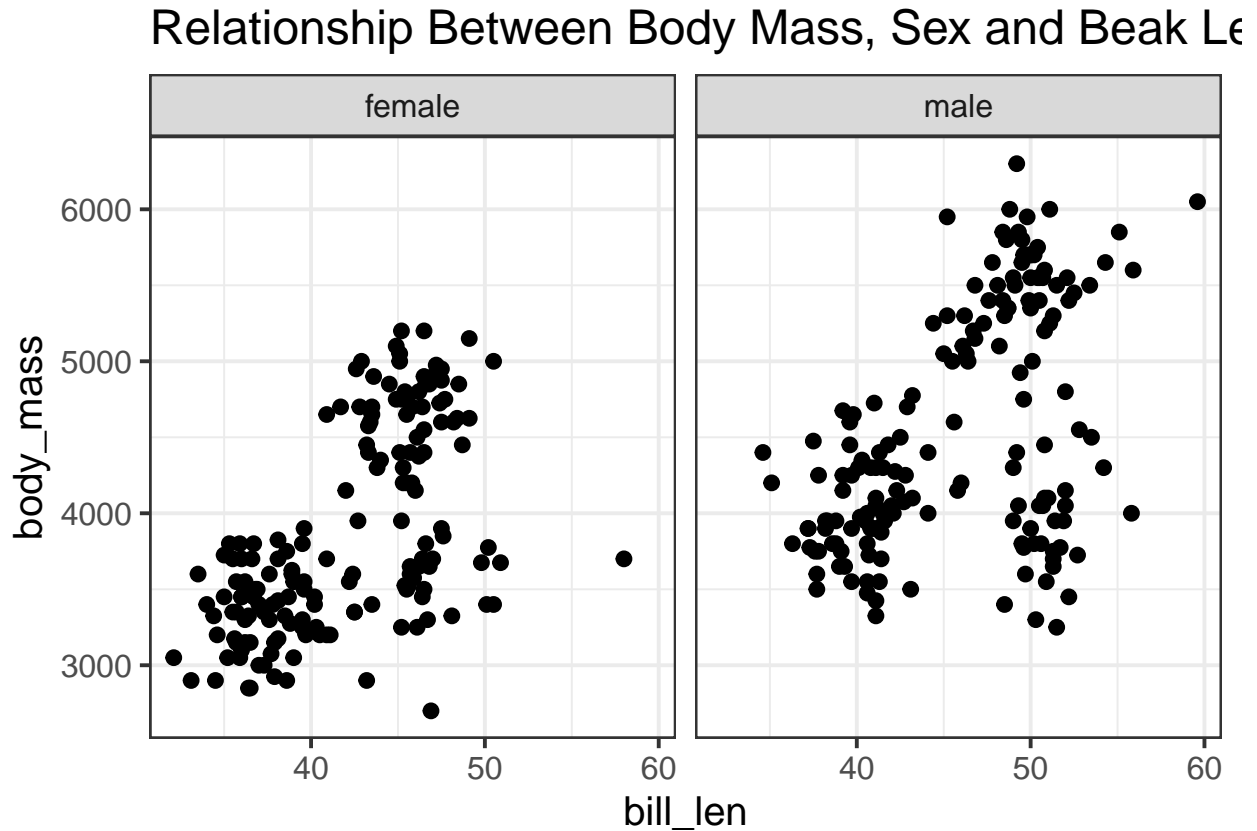
## The following object is masked from 'package:graphics':
##
##   pairs

install.packages("palmerpenguins")

## Installing package into '/cloud/lib/x86_64-pc-linux-gnu-library/4.5'
## (as 'lib' is unspecified)
```

```
penguins <- na.omit(penguins)
```

```
ggplot(penguins, aes(x = bill_len, y = body_mass)) +  
  geom_point() +  
  labs(title = "Relationship Between Body Mass, Sex and Beak Length in Penguins") +  
  facet_grid(~sex) + theme_bw(base_size = 15)
```



The correlation between beak length and body mass is higher in females than in males. Mens dot pattern is more dispersed than womens. The number of points for women has reached around 5000 at most. The mens points have reached over 6000. Men are much more disorganized than women. Therefore, we can say that womens correlation relationship is higher than men.