

# Palmer penguins report

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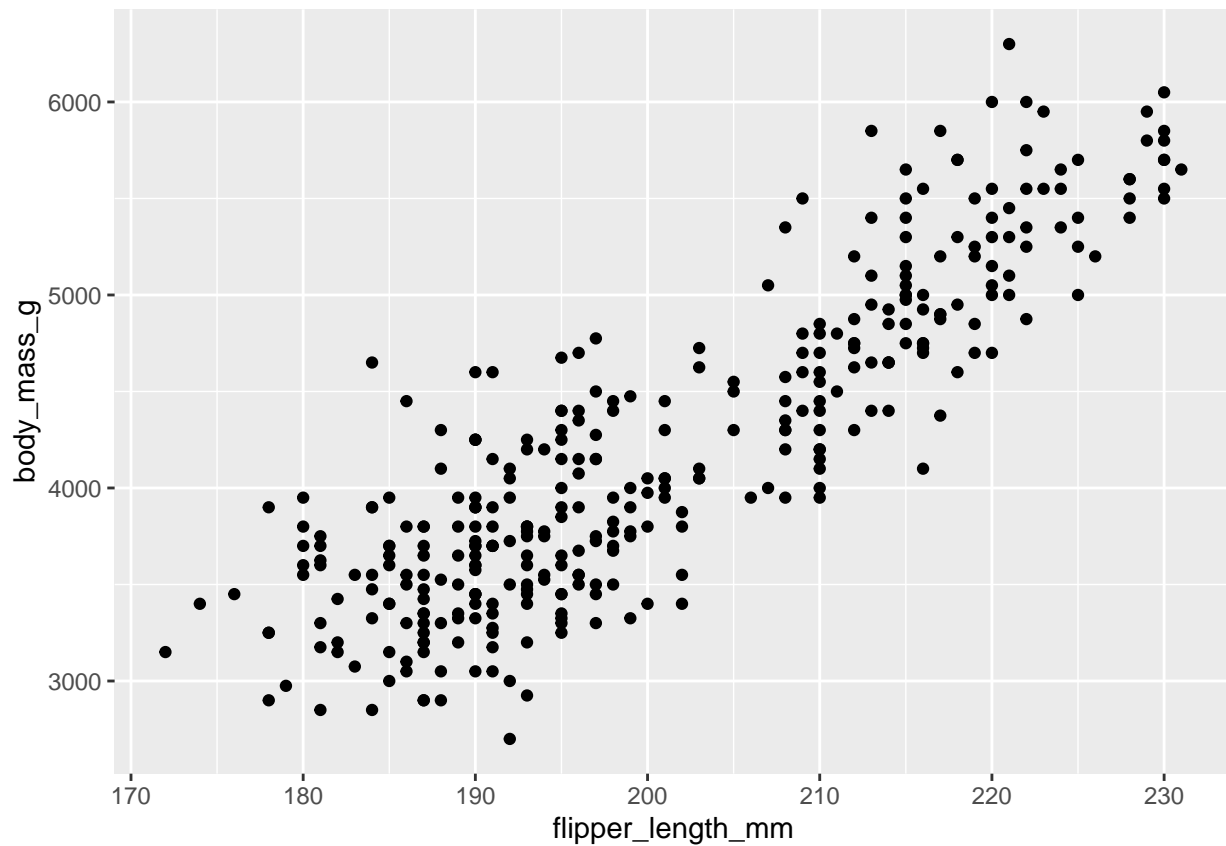
In this report we want to verify if there exists a correlation between the flipper length and the body mass of the penguins from the data set **palmerpenguins**.

## Loading librarys and the data set

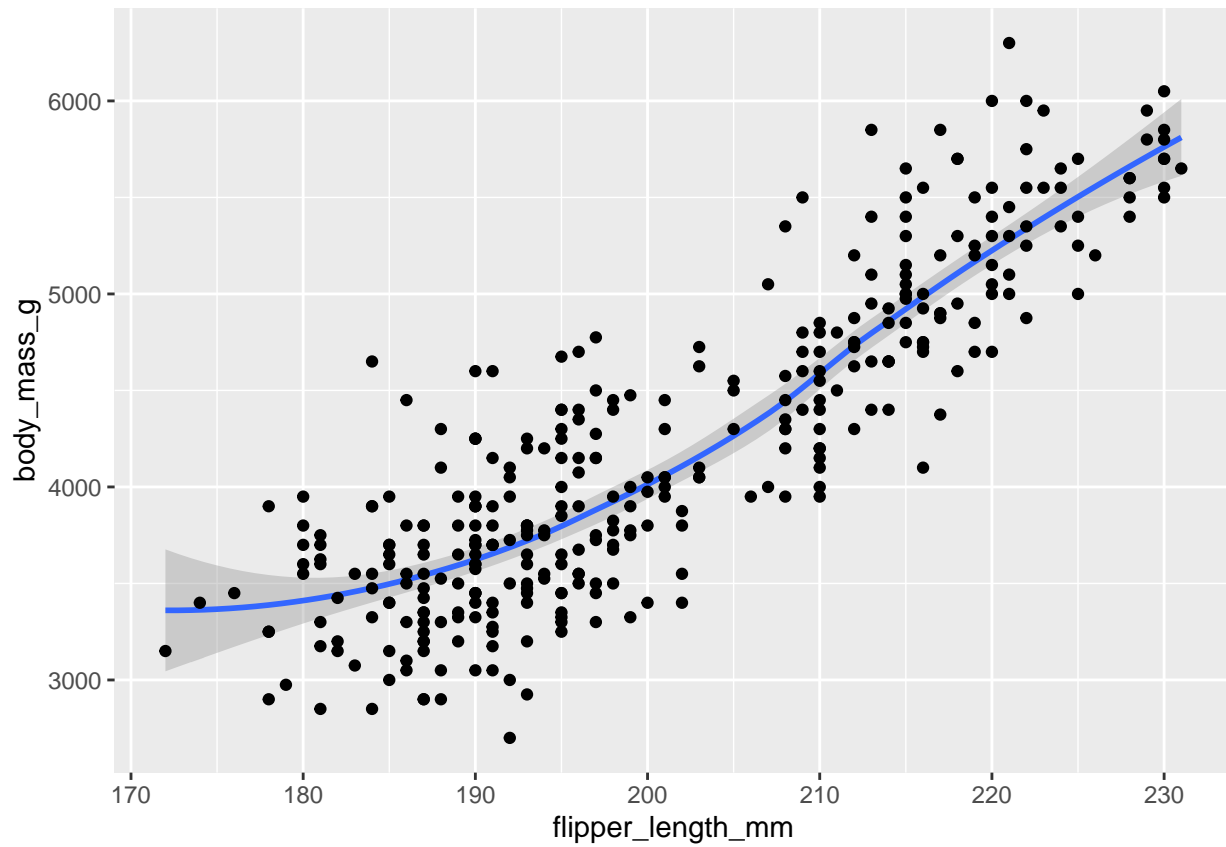
```
library(ggplot2)
library(palmerpenguins)
data(penguins)
```

## Correlation flipper length vs body mass

we plot the variables flipper length vs body mass to check if there is a correlation between them:

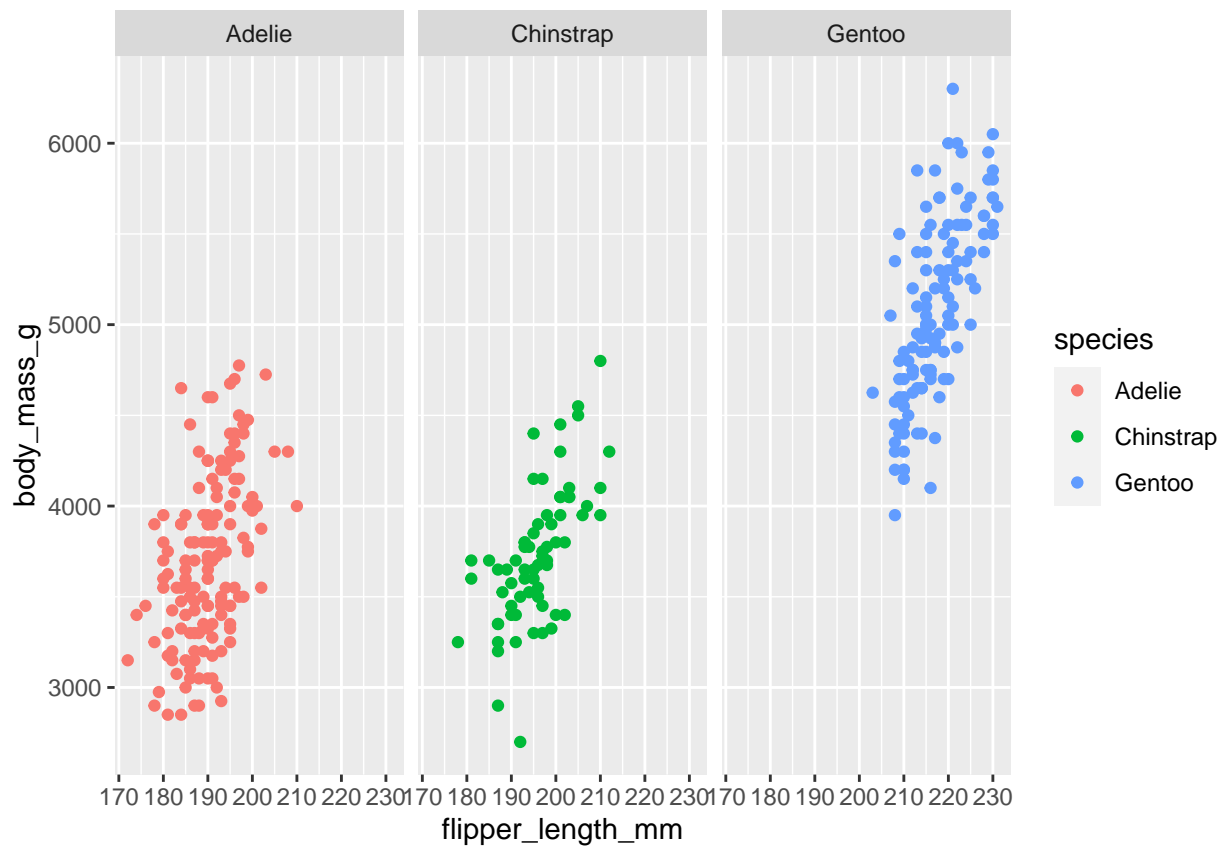


just to be sure we verify by adding a trend line over the plot:

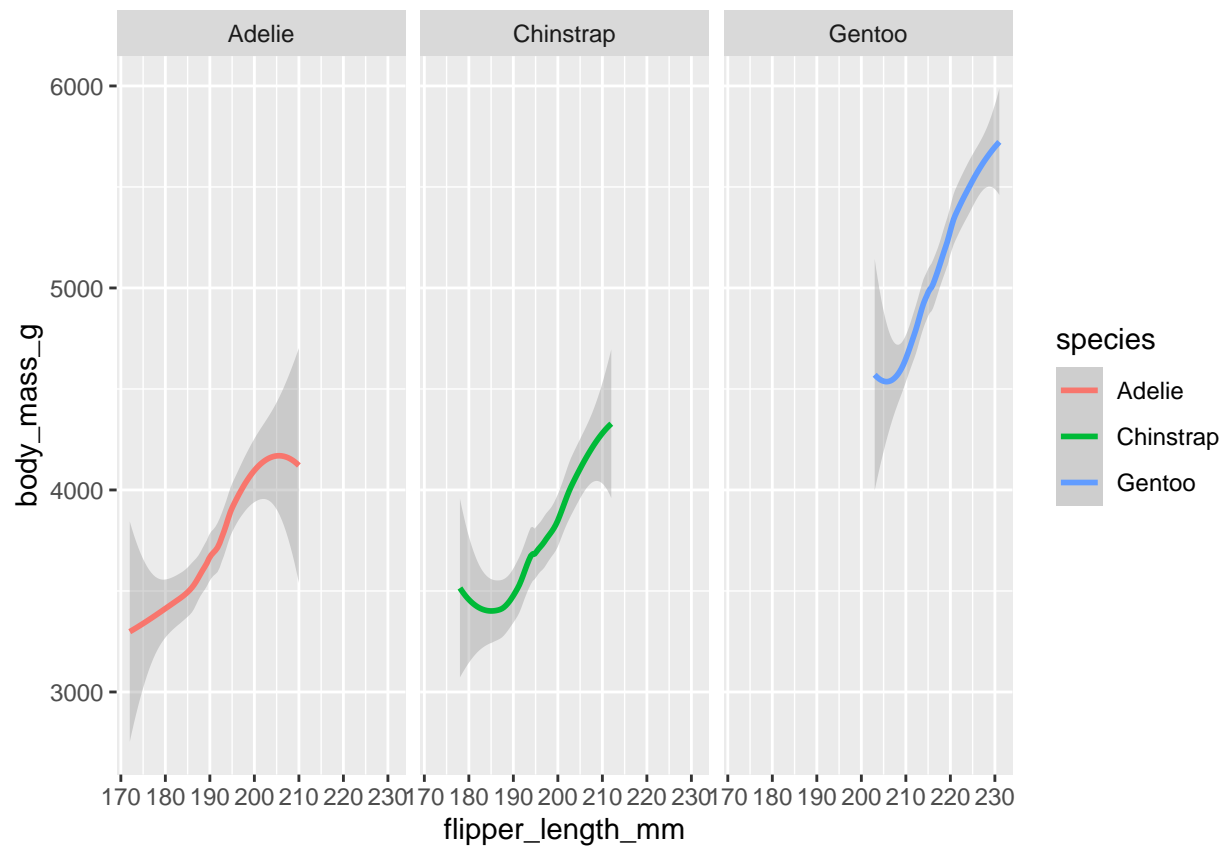


## Correlation flipper length vs body mass by species

Now, we are also interested to see if this behavior continue if we make the same analysis by species:



again we add a trend line to verify:



## Conclusions

In fact, there exists a correlation between the variables flipper length and body mass; not only considering the data as a whole but also making the analysis by species.