Ggplot aesthetics RMarkdown

Miracle

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R Markdown

This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R Markdown see http://rmarkdown.rstudio.com.

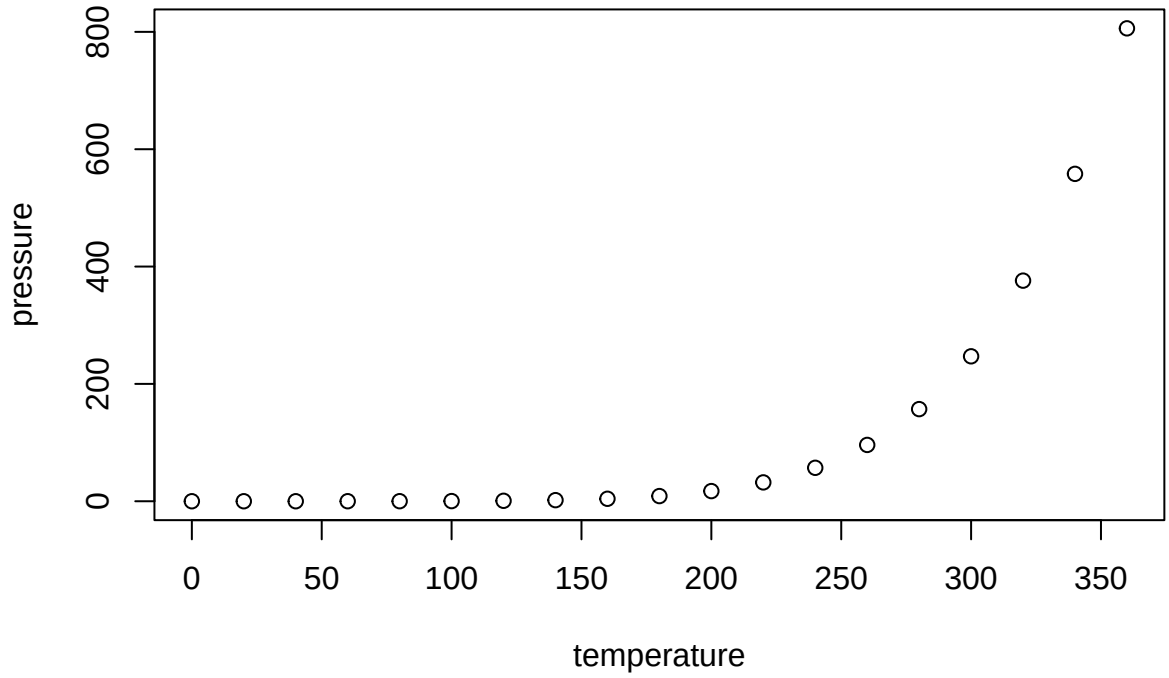
When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

```
summary(cars)
```

```
##      speed           dist       
##  Min.   : 4.0   Min.   :  2.00  
##  1st Qu.:12.0   1st Qu.: 26.00  
##  Median :15.0   Median : 36.00  
##  Mean   :15.4   Mean   : 42.98  
##  3rd Qu.:19.0   3rd Qu.: 56.00  
##  Max.   :25.0   Max.   :120.00
```

Including Plots

You can also embed plots, for example:



Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated the plot.

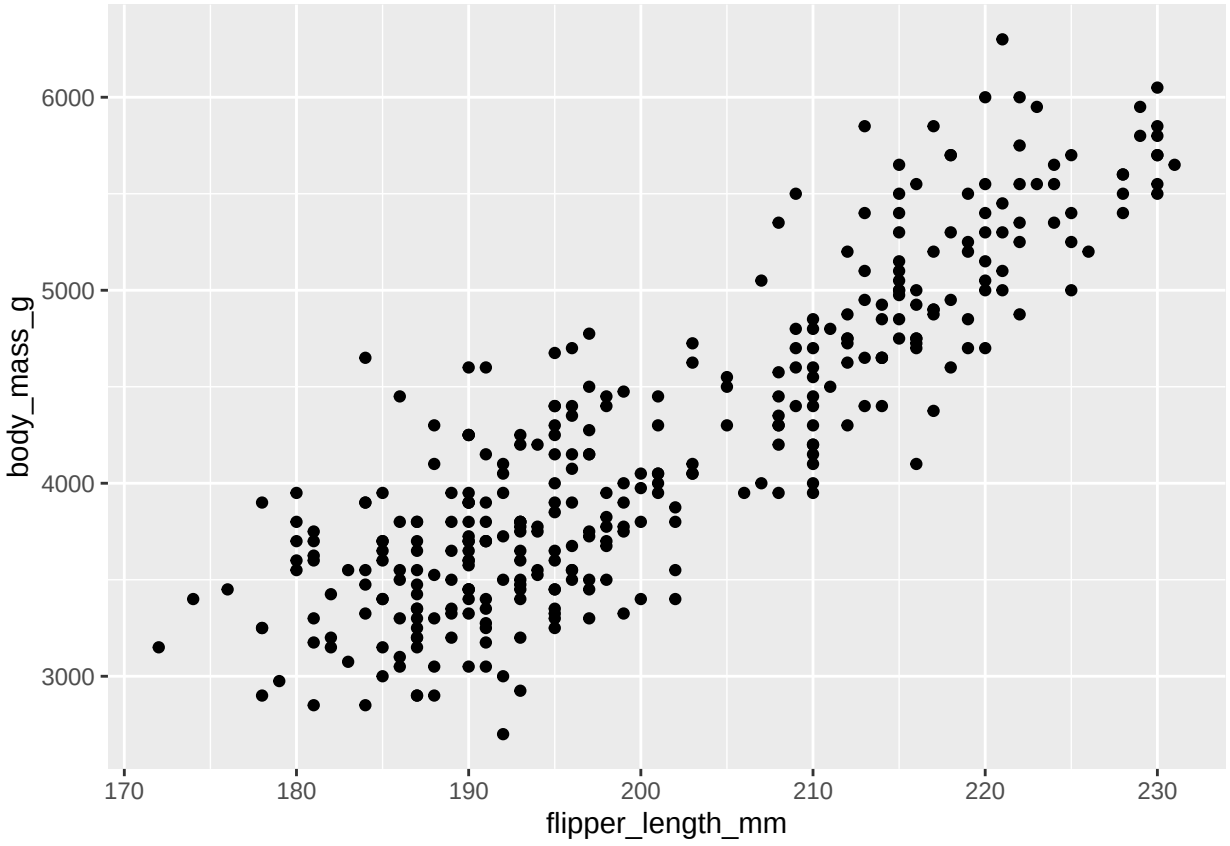
we will upload necessary

```
library(ggplot2)
library(palmerpenguins)
```

we will start with simple graph ggplot(data = penguins)+ geom_point(mapping = aes(x=flipper_length_mm,y=body_mass_

```
ggplot(data = penguins)+ geom_point(mapping = aes(x=flipper_length_mm,y=body_mass_g))
```

```
## Warning: Removed 2 rows containing missing values (‘geom_point()‘).
```



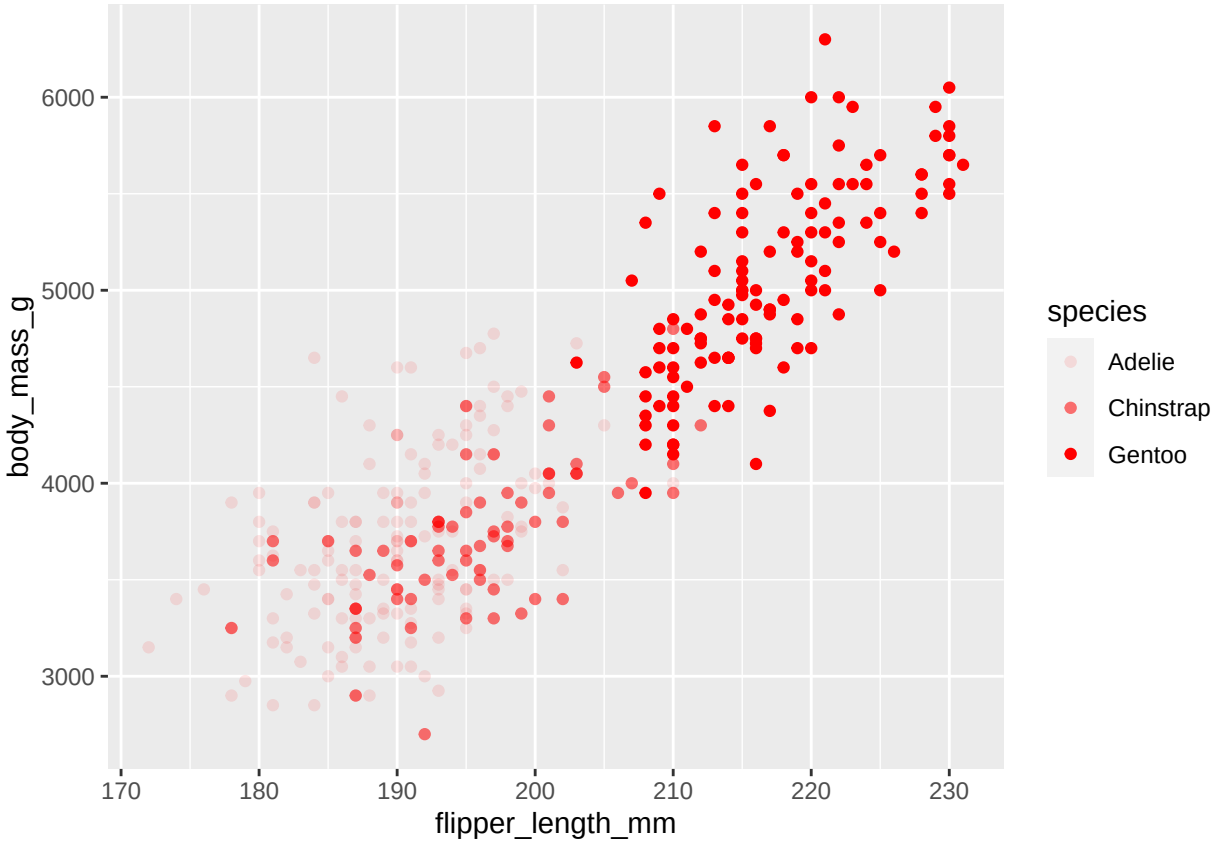
to create a visual with scatterplots

ggplot(data = penguins)+ geom_point(mapping = aes(x=flipper_length_mm,y=body_mass_g,alpha=species),color="red"

```
ggplot(data = penguins)+
  geom_point(mapping = aes(x=flipper_length_mm,y=body_mass_g,alpha=species),color="red")
```

```
## Warning: Using alpha for a discrete variable is not advised.
```

```
## Warning: Removed 2 rows containing missing values (`geom_point()`).
```



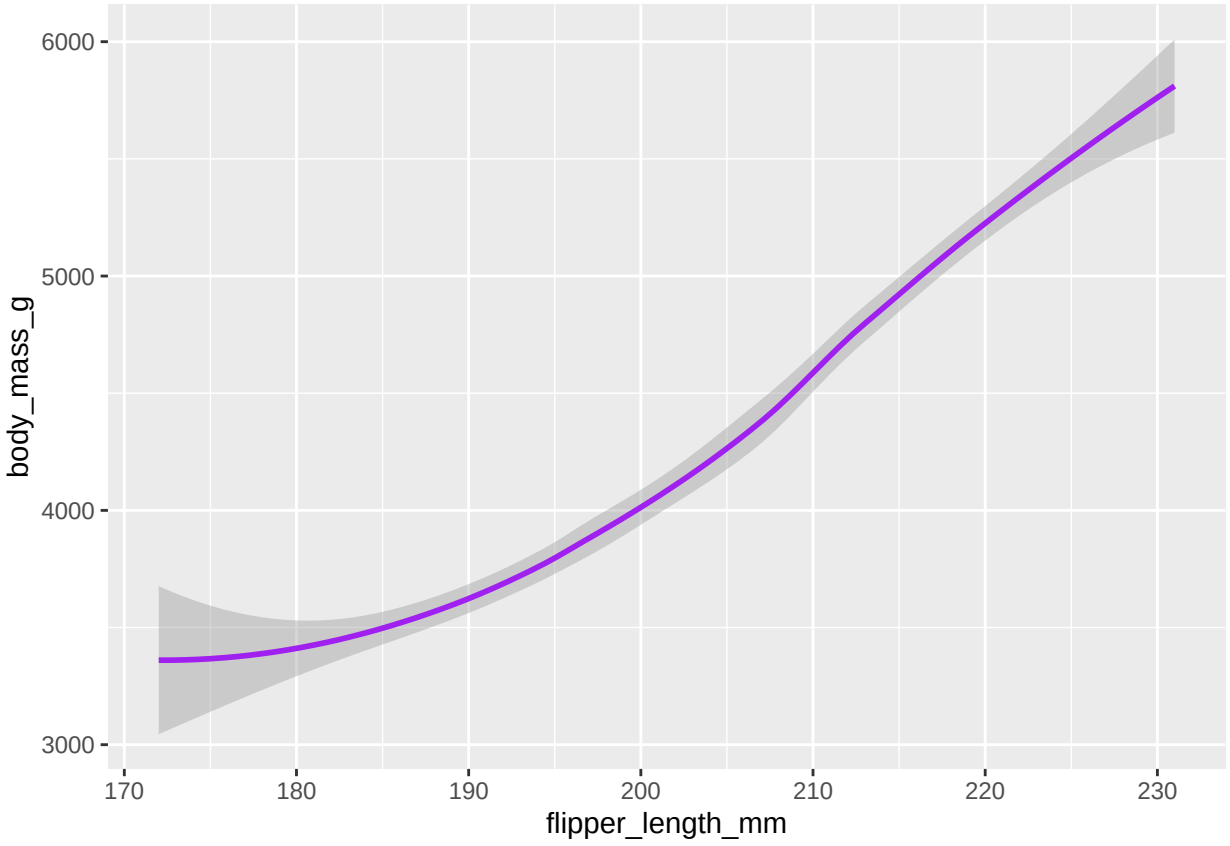
creating a visual with smooth line

ggplot(data = penguins)+ geom_smooth(mapping = aes(x=flipper_length_mm,y=body_mass_g),color="purple")

```
ggplot(data = penguins)+ geom_smooth(mapping = aes(x=flipper_length_mm,y=body_mass_g),color="purple")
```

```
## `geom_smooth()` using method = 'loess' and formula = 'y ~ x'
```

```
## Warning: Removed 2 rows containing non-finite values (`stat_smooth()`).
```



creating two different visuals by combining them

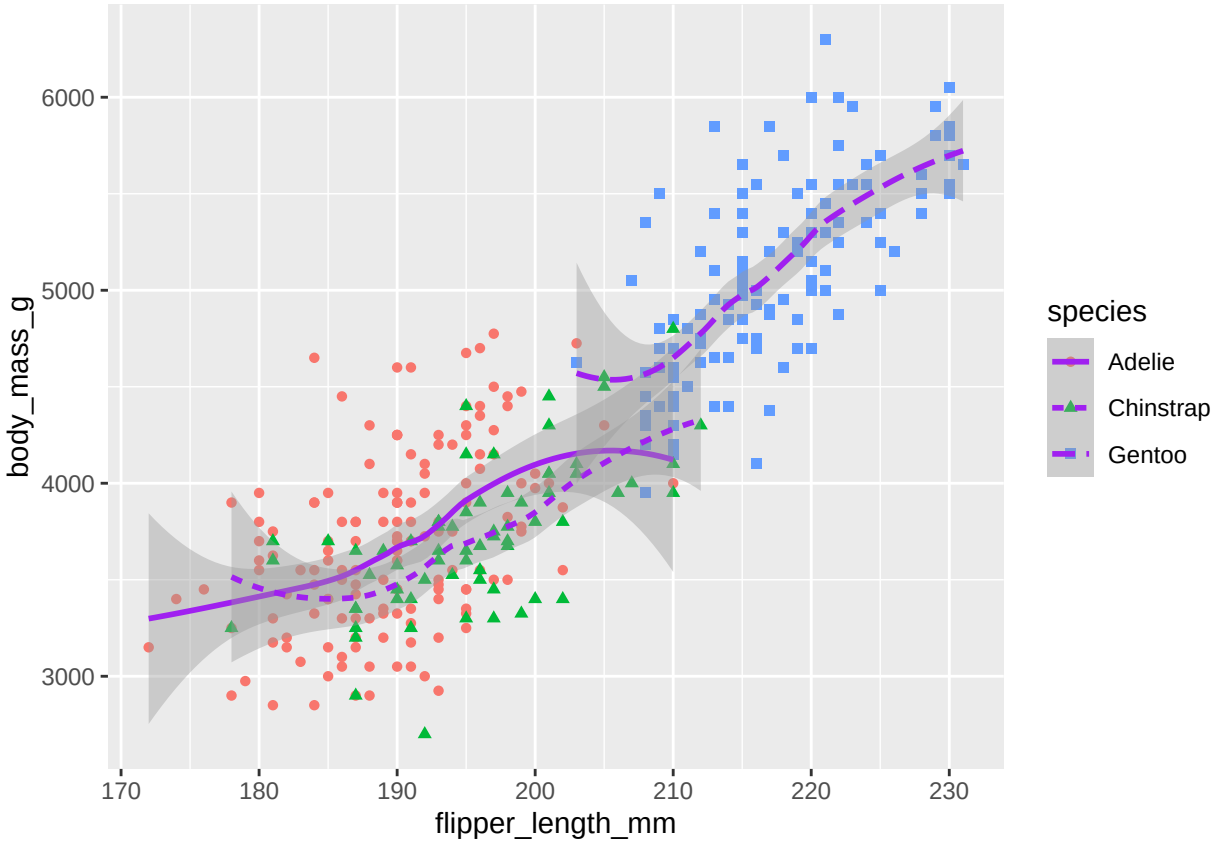
ggplot(data = penguins)+ geom_point(mapping = aes(x=flipper_length_mm,y=body_mass_g,shape=species,color=species
geom_smooth(mapping = aes(x=flipper_length_mm,y=body_mass_g,linetype=species),color="purple")

```
ggplot(data = penguins)+
  geom_point(mapping = aes(x=flipper_length_mm,y=body_mass_g,shape=species,color=species))+
  geom_smooth(mapping = aes(x=flipper_length_mm,y=body_mass_g,linetype=species),color="purple")
```

```
## `geom_smooth()` using method = 'loess' and formula = 'y ~ x'
```

```
## Warning: Removed 2 rows containing non-finite values (`stat_smooth()`).
```

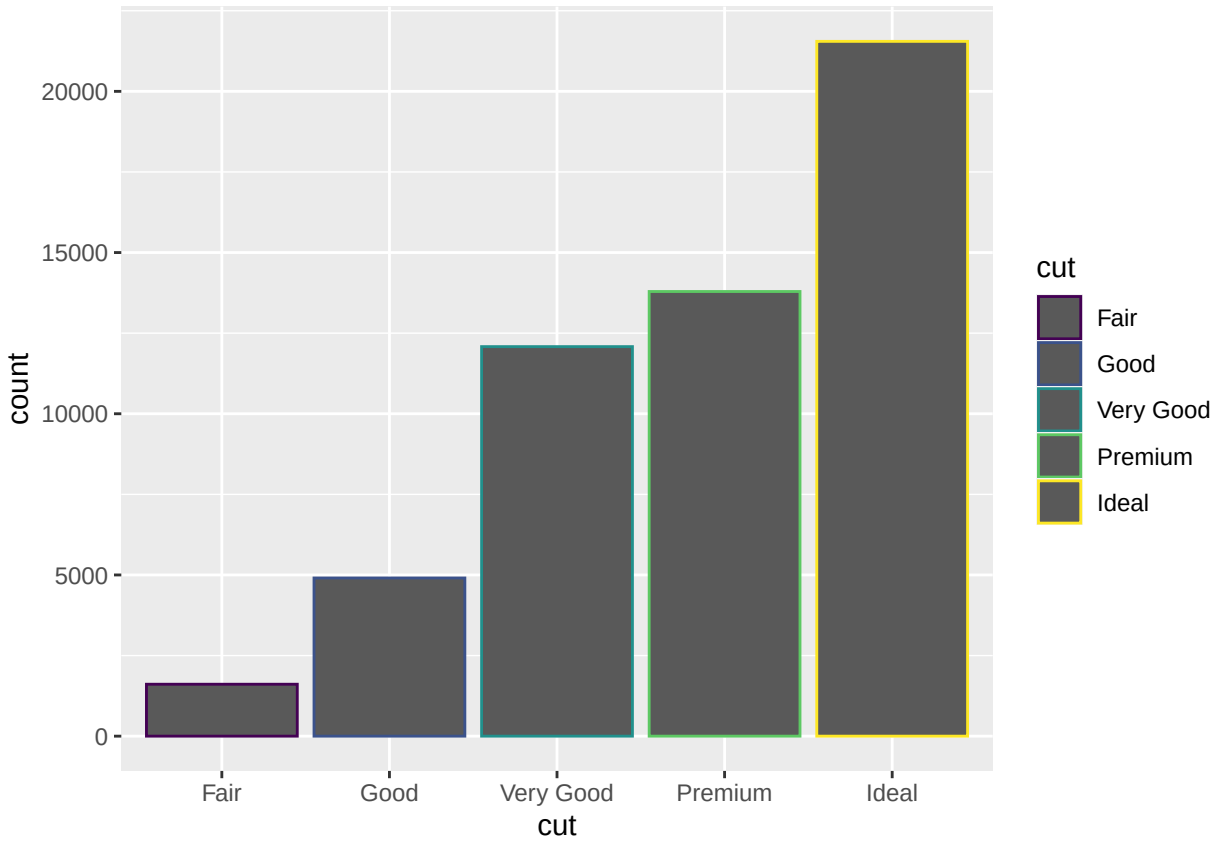
```
## Warning: Removed 2 rows containing missing values (`geom_point()`).
```



working with bar charts

###it gives colors to only outlines ggplot(data = diamonds)+ geom_bar(mapping = aes(x=cut,color=cut))

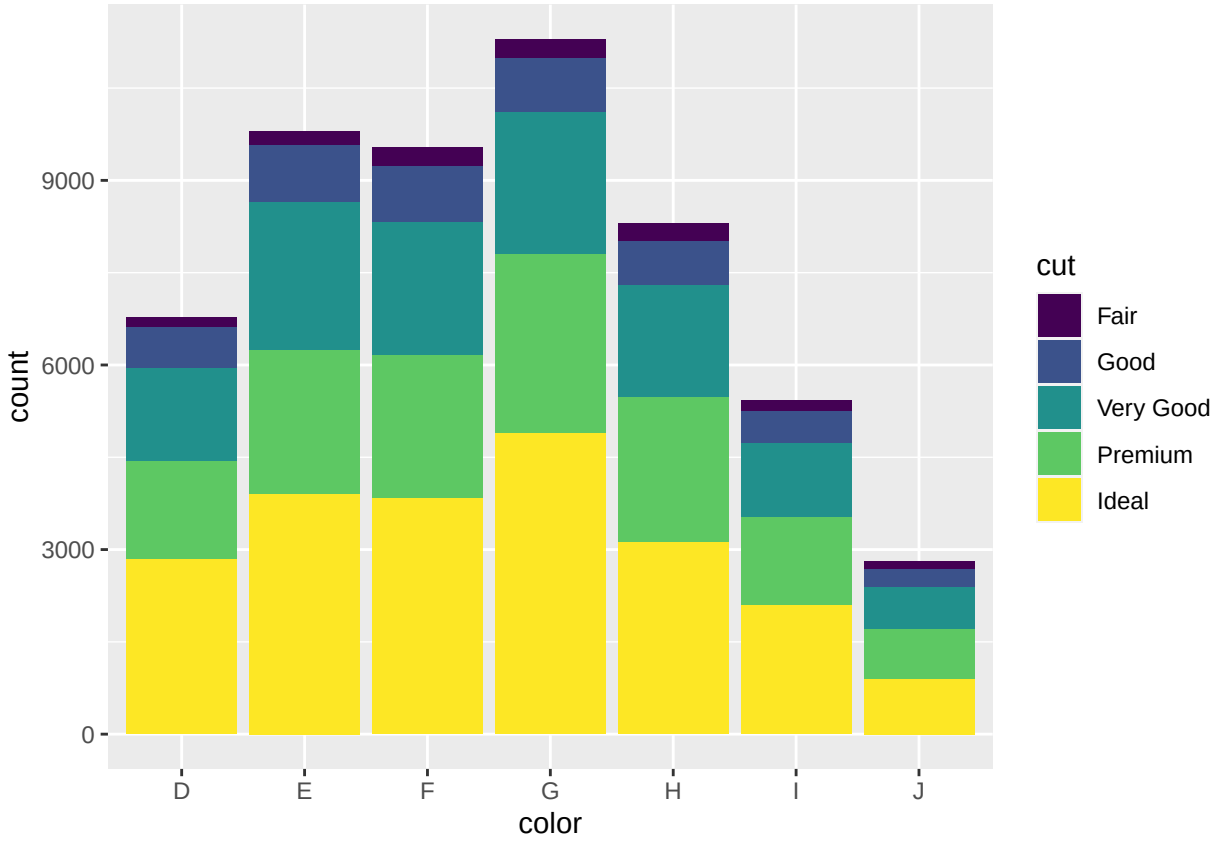
```
ggplot(data = diamonds)+ geom_bar(mapping = aes(x=cut,color=cut))
```



it fills the inside of bars with colors

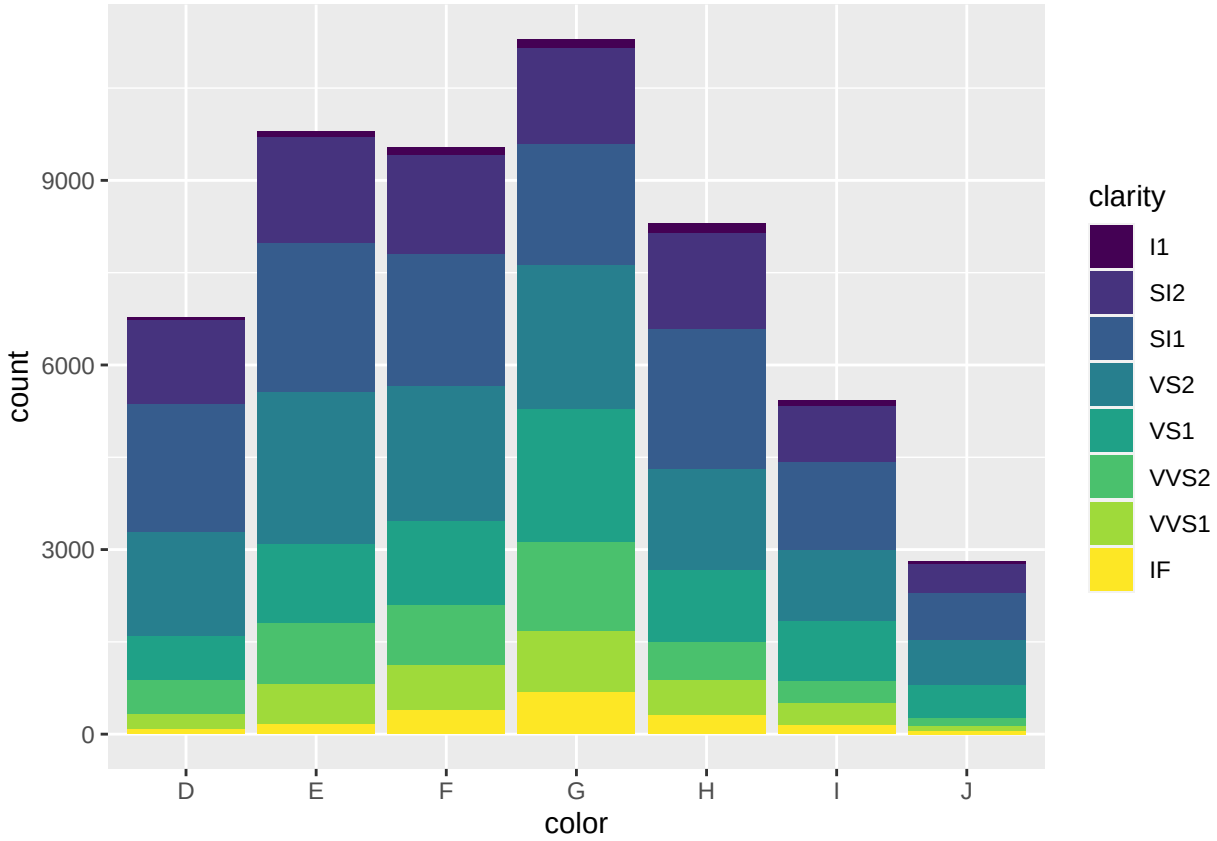
ggplot(data=diamonds)+ geom_bar(mapping=aes(x=color,fill=cut))

```
ggplot(data=diamonds)+ geom_bar(mapping=aes(x=color,fill=cut))
```



we will add clarity to the bars ggplot(data=diamonds)+ geom_bar(mapping=aes(x=color,fill=clarity))

```
ggplot(data=diamonds)+ geom_bar(mapping=aes(x=color,fill=clarity))
```

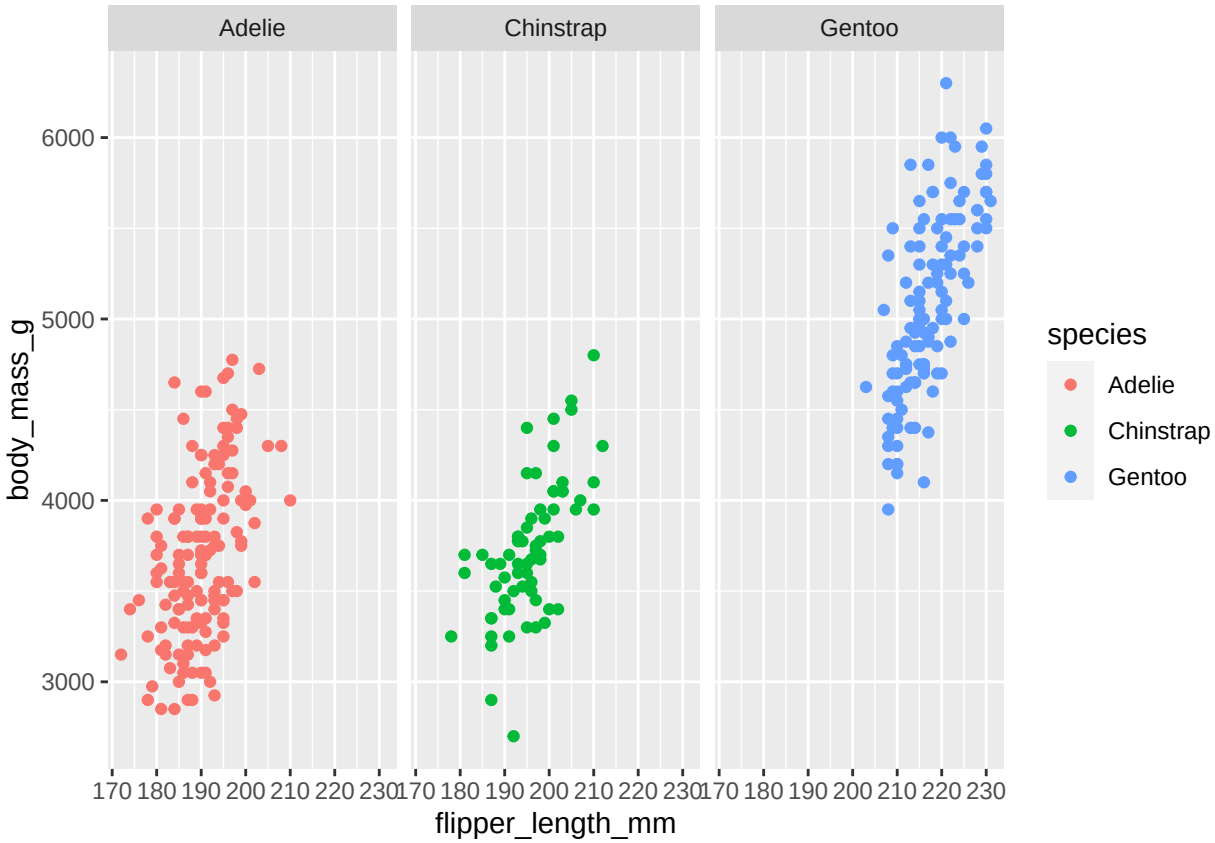


creating separate plots for each species using FACET_WRAP funstion

ggplot(data = penguins)+ geom_point(mapping = aes(x=flipper_length_mm,y=body_mass_g,color=species))+ facet_wrap(~species)

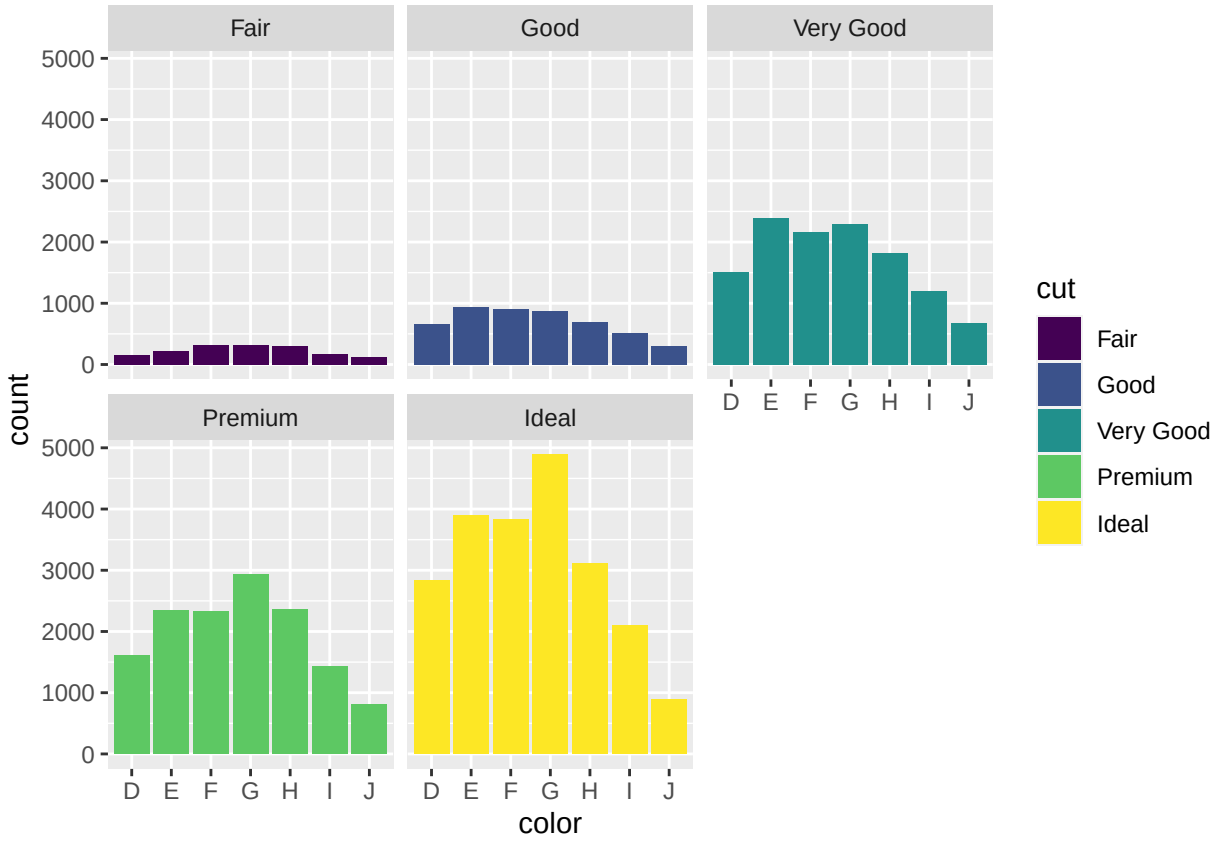
```
ggplot(data = penguins)+
  geom_point(mapping = aes(x=flipper_length_mm,y=body_mass_g,color=species))+
  facet_wrap(~species)
```

```
## Warning: Removed 2 rows containing missing values (`geom_point()`).
```



ggplot(data=diamonds)+ geom_bar(mapping=aes(x=color,fill=cut))+ facet_wrap(~cut)

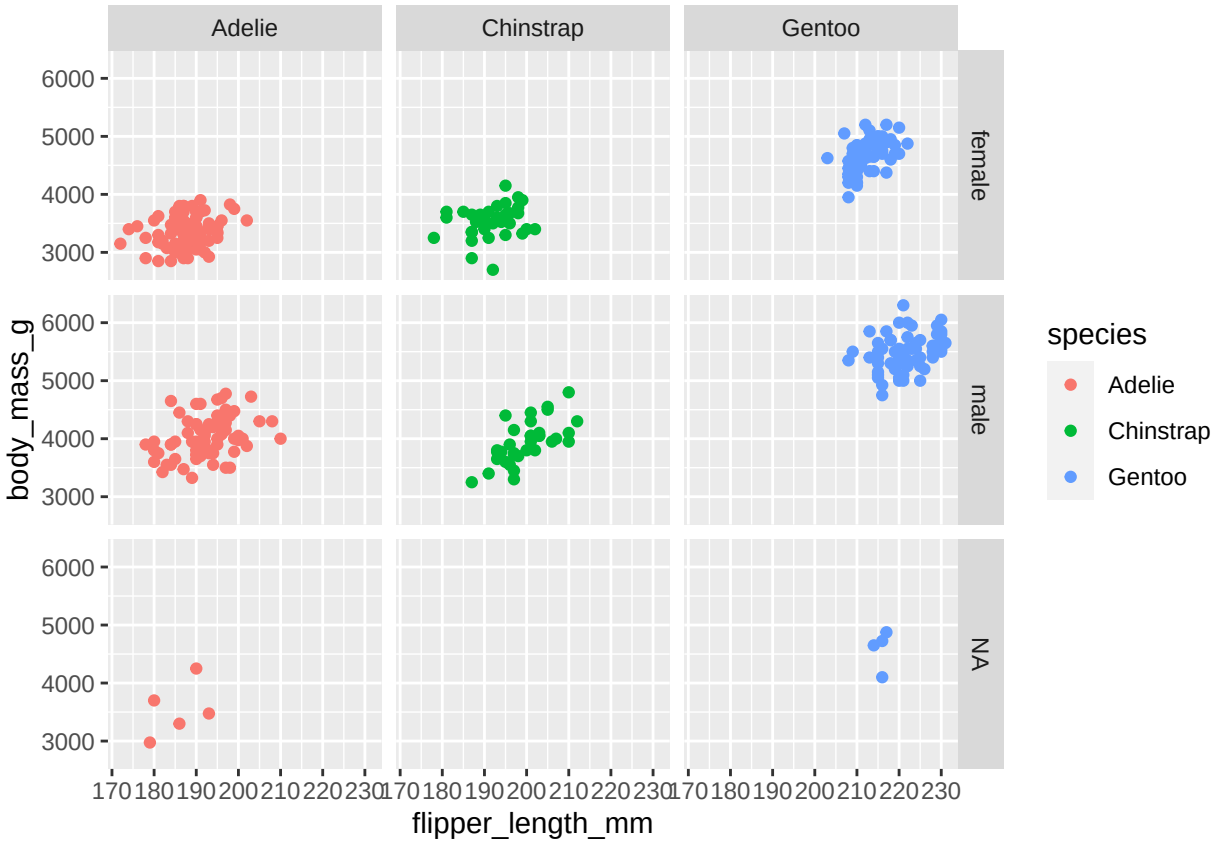
```
ggplot(data=diamonds)+ geom_bar(mapping=aes(x=color,fill=cut))+ facet_wrap(~cut)
```



ggplot(data = penguins)+ geom_point(mapping = aes(x=flipper_length_mm,y=body_mass_g,color=species))+ facet_grid(sex~species)

```
ggplot(data = penguins)+
  geom_point(mapping = aes(x=flipper_length_mm,y=body_mass_g,color=species))+
  facet_grid(sex~species)
```

```
## Warning: Removed 2 rows containing missing values (‘geom_point()‘).
```


Adelie
Chinstrap
Gentoo
female
male
NA
body_mass_g
flipper_length_mm
6000
5000
4000
3000
170
180
190
200
210
220
230
species
Adelie
Chinstrap
Gentoo