R Notebook

```
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library(tidyverse)
```

```
## -- Attaching packages --------------------------------------- tidyverse 1.3.0 --
```

```
## v ggplot2 3.3.3     v purrr   0.3.4
## v tibble  3.0.6     v dplyr   1.0.4
## v tidyr   1.1.2     v stringr 1.4.0
## v readr   1.4.0     v forcats 0.5.1
```

```
## -- Conflicts ------------------------------------------ tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
```

```
library(RColorBrewer)
library(ggplot2)
```

```
iris
```

Sepal.Length <dbl>	Sepal.Width <dbl>	Petal.Length <dbl>	Petal.Width <dbl>	Species <fct>
5.1	3.5	1.4	0.2	setosa
4.9	3.0	1.4	0.2	setosa
4.7	3.2	1.3	0.2	setosa
4.6	3.1	1.5	0.2	setosa
5.0	3.6	1.4	0.2	setosa
5.4	3.9	1.7	0.4	setosa
4.6	3.4	1.4	0.3	setosa
5.0	3.4	1.5	0.2	setosa
4.4	2.9	1.4	0.2	setosa
4.9	3.1	1.5	0.1	setosa

1-10 of 150 rows Previous **1** 2 3 4 5 6 … 15 Next

```
groupiris.summary<-iris %>%group_by(Species)%>% summarize(mean(Sepal.Length),mean(Sepal.Width),mean(Petal.Length),mean(Petal.Width)
)
groupiris.summary
```

Species <fct>	mean(Sepal.Length) <dbl>	mean(Sepal.Width) <dbl>	mean(Petal.Length) <dbl>	mean(Petal.Wi <d
1 setosa	5.006	3.428	1.462	0.
2 versicolor	5.936	2.770	4.260	1.
3 virginica	6.588	2.974	5.552	2.

3 rows

```
#As we can see from the graph the setosa species has generally bigger sepal width but smaller sepal length than the rest of the specious. The virginica specious seems to have the greatest sepal length. The visual seems to be showing a positive correlation between sepal width and sepal length among all different species.

ggplot(iris,aes(Sepal.Length,Sepal.Width, color=Species))+geom_point(aes(size=Sepal.Width))+ scale_color_brewer(palette = "Accent")
```