Demo_3

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##This is the first R Markdown file using RMarkdown_Demo_1.R from: https://github.com/ourcodingclub/CC-2-RMarkdown

Download the data set for this example script from: https://github.com/ourcodingclub/Datasets/tree/master/Seedling_Traits

Install and load the relevant packages

```
library(dplyr) # To get summary statistics on the data
```

```
##
## 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
```

```
library(broom)
library(pander)
```

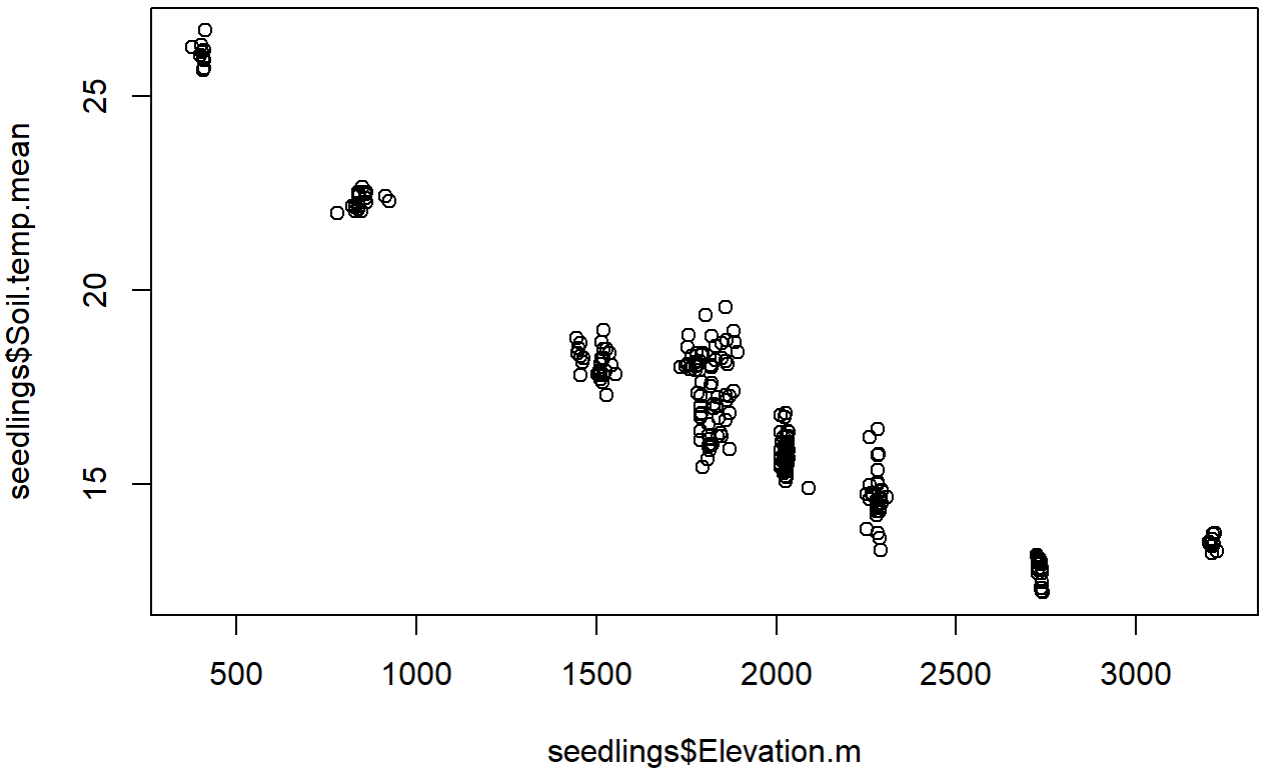
Import data

```
seedlings <- read.csv("CC-2-Rmarkdown/Datasets/Seedling_Traits/Seedling_Elevation_Traits.csv")
```

Investigating the data

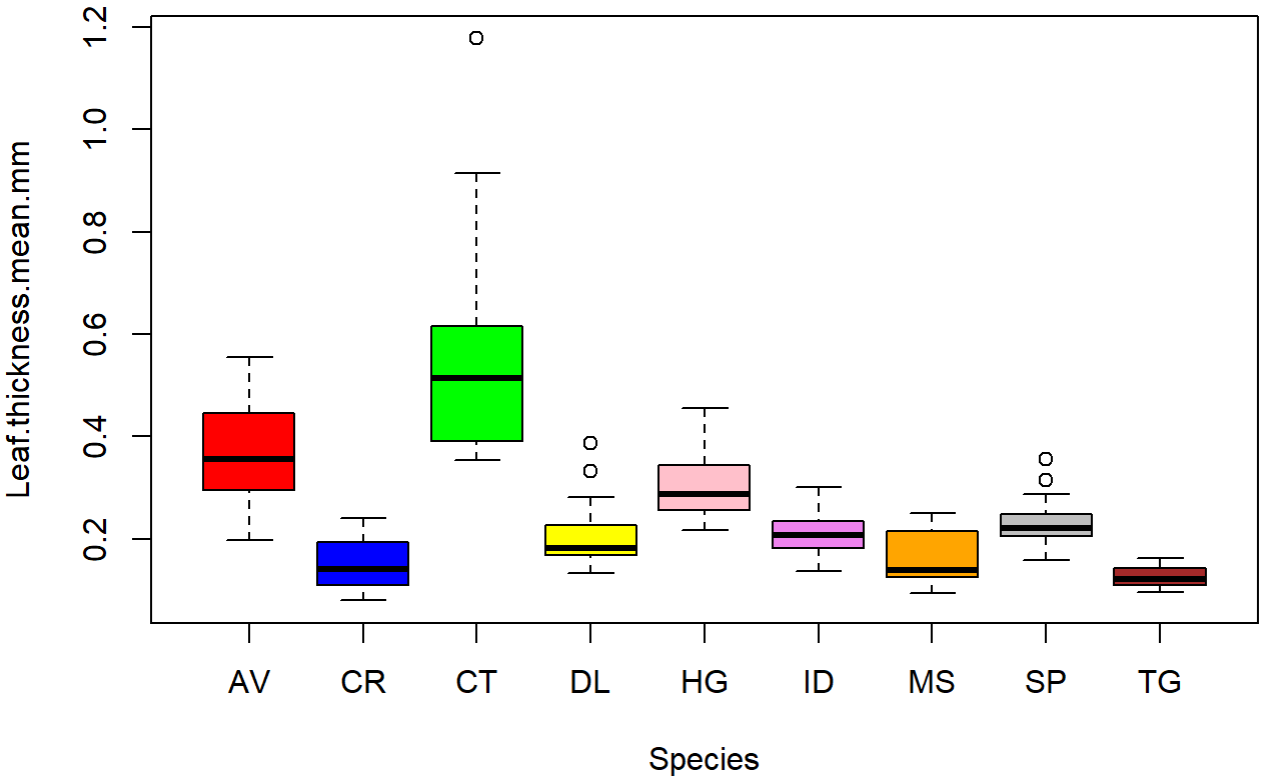
Create a scatterplot showing the relationship between

```
plot(x = seedlings$Elevation.m, y = seedlings$Soil.temp.mean)
```



> The next f boxplots show how `Leaf.thickness.mean.mm' varies by` Species'

```
boxplot(Leaf.thickness.mean.mm ~ Species,
        col=c("red", "blue", "green", "yellow", "pink", "violet", "orange", "grey", "brown"),
data = seedlings)
```



> Summary statistics for each Species

```
seedlings_sitesumm <- seedlings %>%
  group_by(Site) %>%
  summarise("Mean Soil Temp." = mean(Soil.temp.mean), "Mean Elevation" = mean(Elevation.m), "U
ndergrowth density" = mean(Num.seedlings.comp))
```

> Table of `seedlings_specsumm' and` seedlings_specsumm' in your R markdown document using pander(), the instructions can be found in the tutorial

```
pander(seedlings_sitesumm)
```

Site	Mean Soil Temp.	Mean Elevation	Undergrowth density
A	22.16	830.7	52.8
B	22.44	867.6	46.9
C	26.1	405.7	37.2
D	13.47	3212	55.36

E	18.13	1502	59.43
F	NA	1772	41
G	12.76	2733	46
H	15.79	2026	41.15
I	14.68	2280	38.9
J	17.21	1832	40.06