STAT 443: Lab 1

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10 January, 2025

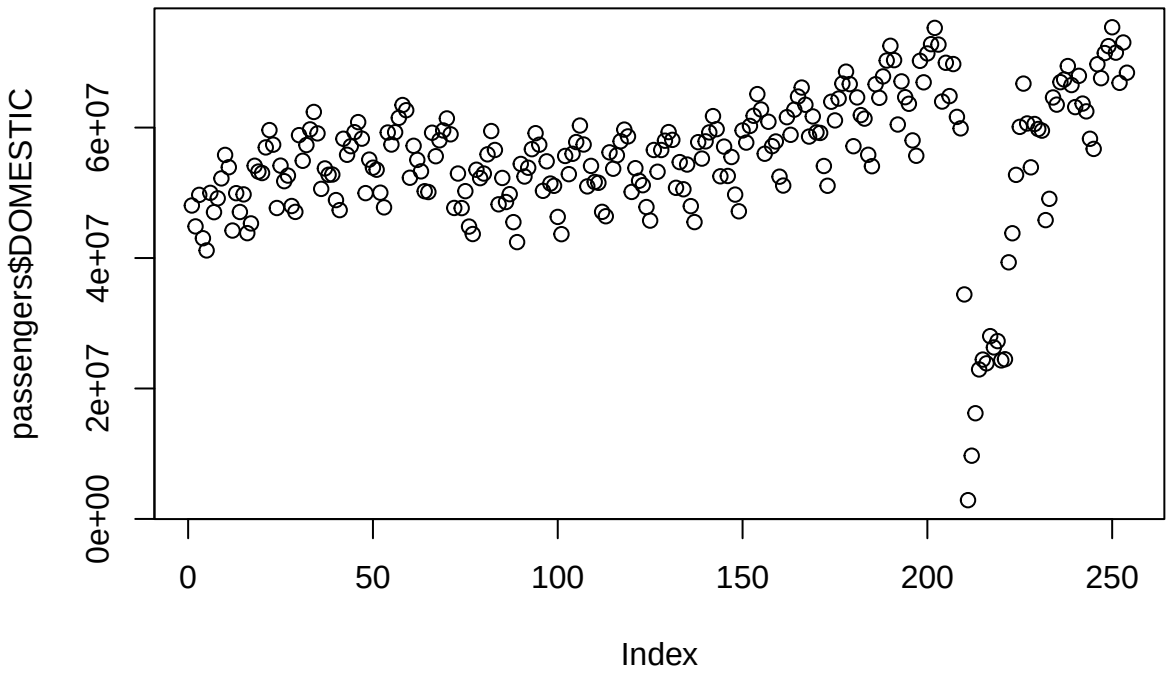
Question 1

(a)

```
# this is where your R code goes

passengers <- read.csv("dat_Passengers.csv")
# head(passengers, 5)

plot(passengers$DOMESTIC)
```



Using the plot function on the DOMESTIC column, we see that it plots it against the index.

Ideally, I would like to have visualisation of Domestic Flights plotted against the Year or Month instead of the Index. Furthermore, I would extend the y-axis more as the range is a lot higher and I would prefer smaller points such that we have less overlapping data points.

(b)

```
# this is where your R code goes
is.ts(passengers)
```

```
## [1] FALSE
```

```
x <- ts(passengers$TOTAL,
        start = c(2002, 10),
        frequency = 12)

is.ts(x)
```

```
## [1] TRUE
```

(c)

```
# this is where your R code goes
```

Question 2

(a)

```
# this is where your R code goes
```

(b)

```
# this is where your R code goes
```

(c)

```
# this is where your R code goes
```

More information on R Markdown

This is an R Markdown document, which can be used as a template for STAT 443 labs and assignments. 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
```

Using the function *kable*, it produces a nicer table

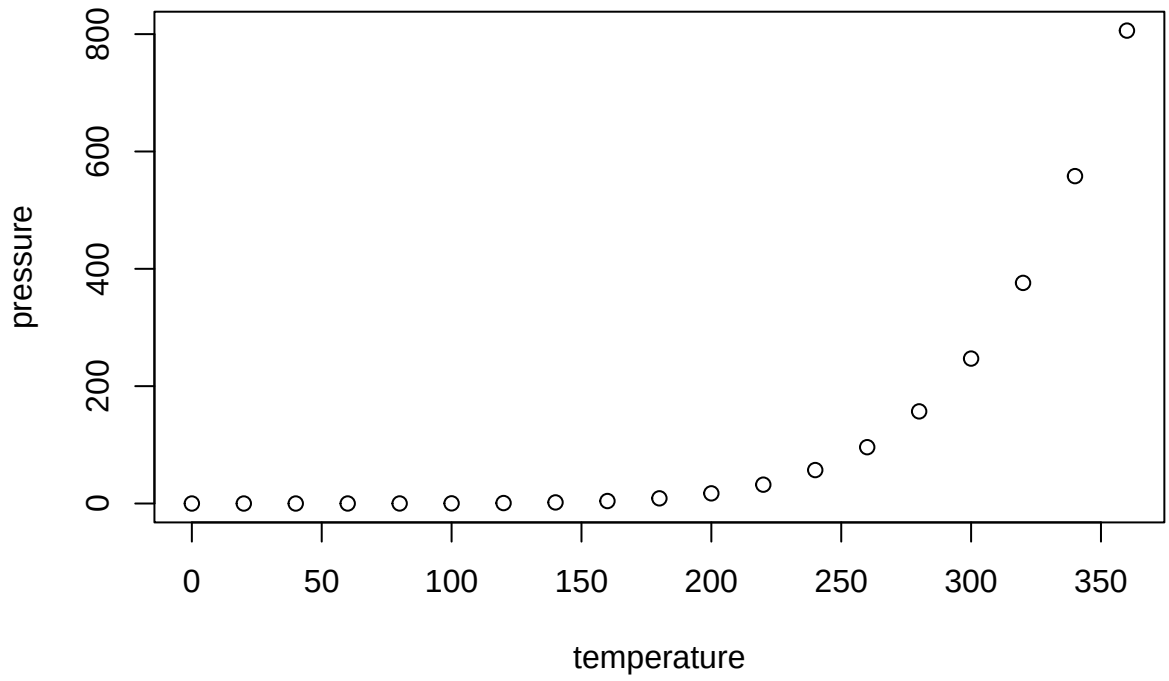
```
kable(summary(cars))
```

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:

```
plot(pressure)
```



Note that specifying `echo = FALSE` parameter would prevent printing of the R code that generated the plot. This is something you may want to do for larger reports that would not require display of the R code.

You can also modify the size and alignment of the figure.

```
plot(pressure)
```

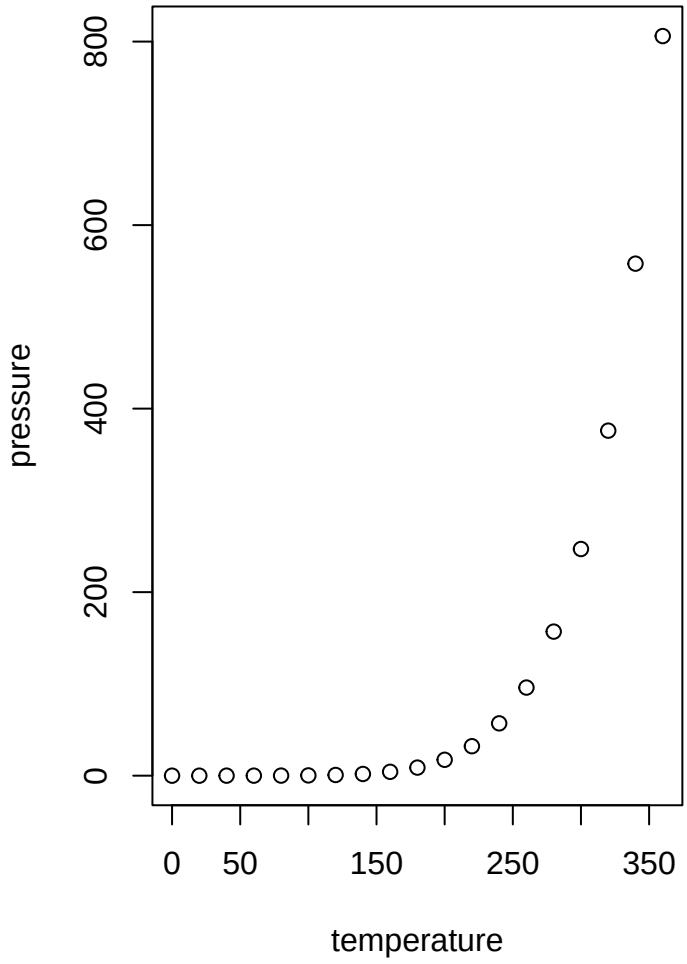


Figure 1: title