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---
title: "chapter 6 Data Cleaning & apply Lab B"
author: "Your Name Here"
output: html_document
---
```

#### Remember to change the `author: ` field on this Rmd file to your own name.

### #### 1. Loop practice

**\*(a)\*** Write a function called `calculateRowMeans` that uses a **for loop** to calculate the row means of a matrix `x`.

```
` `{r}
# Edit me
` `
```

**\*(b)\*** Try out your function on the random matrix `fake.data` defined below.

```
` `{r}
set.seed(12345) # Set seed of random number generator
fake.data <- matrix(runif(800), nrow=25)
` `
```

**\*(b)\*** Use the `apply()` function to calculate the row means of the matrix `fake.data`

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```

**\*(c)\*** Compare this to the output of the `rowMeans()` function to check that your calculation is correct.

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### #### 2. tapply() practice

Use `tapply()` on the Cars93 data set to create a table showing the average `Turn.circle` of cars, broken down by vehicle `Type` and `DriveTrain`

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### #### 3. with() practice

```
` `{r}
library(MASS) # Load the library that Cars93 is in
` `
```

Below is a code chunk that produces box plots of Horsepower against vehicle Type.

```
```{r, fig.align='center', fig.width=7, fig.height=5}
boxplot(Cars93$Horsepower ~ Cars93$Type)
```
```

Use the `with()` function to produce the same plot with different syntax.

```
```{r, fig.align='center', fig.width=7, fig.height=5}
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