

Business Analytics Practicum (MGT 4803)

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Logistical updates

- **Tuesdays:** Now exclusively for **Sparck Teams**.
 - **What this means for Sparck Team members:**
 - **Required:** Attendance on Tuesdays is mandatory to engage in discussions and address your team-specific questions.
 - **Optional Thursdays:** You're welcome to join **Thursday sessions**, although these will be primarily focused on **Home Depot teams**.

Logistical updates (cont'd)

- **Thursdays:** Dedicated to **Home Depot Teams**.
 - **What this means for Home Depot Team member:**
 - **Required:** Attendance on Thursdays is mandatory for participation in discussions relevant to your team.
 - **Optional Tuesdays:** While **Tuesday sessions** are focused on **Sparck Teams**, you're invited to attend if interested.

Sparck Technology (Demo Day)

- Company site visit for undergrad business analytics practicum project
 - **When:** Feb 9th or March 1st (both Fridays)?
 - **where:** Sparck at the location in Marietta, GA

Challenge for Sparck Teams: Efficient handling of large datasets

- **Objective:** Develop a method to read hundreds of CSV or RData files simultaneously.
- **Key Question:** How can we smartly read hundreds of CSV or RData files all at once, instead of one by one?

Challenge for Sparck Teams: Efficient handling of large datasets

- **Key Question:** How can we smartly read hundreds of CSV or RData files all at once, instead of one by one?
- **Current Method:** Using the `read.csv` function to load each file individually.
 - using ``for`` or ``while`` loops for this process.

How would you use `for` or `while` loops in R to print the first 5 numbers along with their squares?

For Loop example in R

- Suppose you want to print the first 5 numbers and their squares. A `for` loop is perfect for this task:
 - This loop iterates over the numbers 1 through 5, and for each number `i`, it prints `i` and its square (`i^2`).

R code

```
# Print numbers 1 through 5 and their squares
for (i in 1:5) {
  print(paste(i, "2 = ", i2))
}
```


While loop example in R

- For a `while` loop, let's say you want to keep doubling a number starting from 1 until it exceeds 100.
 - This loop starts with `number` equal to 1 and keeps doubling `number` (i.e., multiplying it by 2) and printing it as long as `number` is less than or equal to 100.

R code

```
# Double a number until it exceeds 100
number = 1
while (number ≤ 100) {
  print(number)
  number = number * 2
}
```

Appendix

Reading data sets using R

- Read the CSV File: Use the `read.csv()` function to load the CSV file into a data frame.
 - View the Data: Use functions like `head()` to view the first few rows of the data frame.
 - Use the `load()` function to read your .rda file.

R code

```
# Load the necessary library
library(readr)
# Read the CSV file
df ← read.csv("XXX.csv")
# Display the first few rows of the data frame
head(df)

load("myData.rda")
print(myData)
```