Business Analytics Practicum (MGT 4803)

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Logistical updates

- **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.

Logistical updates (cont'd)

- **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**.

Sparck Technology (Demo Day)

- Company site visit for undergrad business analytics practicum project

  - **When**: March 1st (Friday)

  - **where**: Sparck at the location in Marietta, GA

- **Objective**: Develop a method to read hundreds of CSV files simultaneously.

- **Key Question**: How can we smartly read hundreds of CSV files all at once, instead of one by one?

- **Key Question**: **How can we smartly read hundreds of CSV files all at once, instead of one by one?**

- Using `data_df = pd.read_csv('XXXXXXX.csv', sep=';')`

  - `pd.read_csv()`: is a function provided by pandas to read a comma-separated values (CSV) file into a DataFrame.

  - The `sep=';'` (separators): indicates that the file uses semicolons (;) instead of the more common commas to separate its columns.

- **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 Python to print the first 5 numbers along with their squares?

Loops example in Python

- Please click on the link provided below
  - In-Class Exercise 1: NumPy, Pandas

For Loop example in Python

- The `for` loop in Python is commonly used to iterate over a sequence (like a range, list, or string).

  - This loop iterates over the numbers 1 through 5, and for each number `i`, it prints `i` and its square (`i^2`).

  - Here's how you can use a `for` loop to print the first 5 numbers and their squares

Python code

```python
# Using a for loop to print the first 5 numbers and their squares
for i in range(1, 6):   # range(1, 6) generates numbers from 1 to 5
    print(f"{i}^2 = {i**2}")
```

While loop example in Python

- The `while` loop in Python repeats as long as a certain condition is true.

    - Here's how to achieve the same task using a while loop:

Python code

```python
# Using a while loop to print the first 5 numbers and their squares
i = 1  # Initialize the counter
while i ≤ 5:
    print(f"{i}^2 = {i**2}")
    i += 1  # Increment the counter
```