

ENME 303 Fall 2021: LAB Assignment

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Week 2: Control Flow I

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|----------|----|----|----|
| Exercise | 01 | 02 | 03 |
| Points | 15 | 15 | 10 |

01. Exercise 1: Leap Year

- a. Write a script that asks the user for a year and determines and displays whether or not that year is a leap year. The output should be formatted using `fprintf` to display answers
 - i. Hint, use [mod\(\)](#)

02. Exercise 2: Tea Time

- a. Use the table below to write the following script: ask the user if they'd like a cup of tea. If so, ask which type and let them know how long it'll need to brew for. The output should be formatted using `fprintf` to display answers

| Tea Type | Celsius | Fahrenheit | Brewing Time |
|------------|-----------------|------------|--------------|
| White Tea | 65-70°C | 150-155°F | 1-2 min. |
| Green Tea | 75-80°C | 165-175°F | 1-2 min. |
| Oolong Tea | 80-85°C | 175-185°F | 2-3 min. |
| Black Tea | 100°C (boiling) | 210°F | 2-3 min. |
| Herbal Tea | 100°C (boiling) | 210°F | 3-6 min. |

- b. Hints:
 - i. [Inputting string](#) from the user
 - ii. [Comparing string](#) in an if statement

03. Exercise 3: Switch

- a. Repeat exercise 'Tea Time' using a switch statement
 - i. [Hint](#)

Lab etiquette:

- ❖ The above exercises should each be their own section in the same .m file (the naming convention in the lab slides)
- ❖ Add your credentials to the top of your script:

```
%-----  
%Author:Karla Negrete  
%UMBC ID: MQ31578  
%Course: ENME 303, Lab Week 1  
%Description: Lab Assignment 1  
%-----
```

- ❖ All assignments must be submitted to Blackboard (no exceptions, even late assignments). Each assignment allows 2 submissions. Double-check your script file before submitting
- ❖ Add comment lines between exercises (% in MATLAB) and comment on all logic in your code. Comments should be above or to the right of the code they are explaining