GEOS397: HW1 Enterkine

Homework #1: GIT, Markdown and MATLAB variables Due: 5:00 PM 09/02/16 Please read the following questions carefully and make sure to answer the Parts completely. In your Markdown file, please include these questions and part numbers with your answers.

Part 1 (30 pts.) Make a Github account using your @u.boisestate.edu email address. Then, using the Github Desktop app, clone the master branch of the GEOS397 project to your local directory. Make a new branch called GEOS397 Lastname, where you insert your last name.

Completed.

Part 2 (30 pts.) In your new branch, make an new file in the HW1 directory called HW1 Lastname.md. Use Markdown to write a summary of how you would go about ensuring that (if the clas had 10 students) you would partner with every other student for the 9 homework sets (you can write some equations if you want). Keep in mind that a constraint imposed on this problem is that no two students in the class can have repeat partners.

```
   % There is probably an easy way to do this with matrixes, but my
 matrix
   % math is rusty. Thinking outside the box: each student is
 assigned a
   % prime number, stored as in an array of n students(studentArray).
   % Multiplying each prime number by every other prime number in the
 array
   % and an additional prime number (KEYPRIME) and storing them in an
   % array. A second iterator would then remove duplicate numbers
 from the
   % array and store as a new array (pairKeyArray). The list of sums
 would
   % allow retreival of each component number via some math and
 logic. I
   % think it would be something like "from 0 to 4 incremented by
 one,
   % select the next number in pairArray, divide it by KEYPRIME,
 divide by
   % each in studentArray, and if the result is an integer, remove
 the
   % entry from pairKeyArray, store both divisors in a new array
 (e.g.
   % homework1, homework2, etc.) unless one of the numbers already
 exists
   % in the homework array. If none of these conditions are met, try
 the
   % next number in pairArray" This would generate a list of five
 unique
   % pairs.

% Part 3 (20 pts.)
% In the same file, list all of the possible variable types in MATLAB
 that are covered in the MATLAB style
% guide reading assignment. Also, give a description of each type and
 list why this is a useful type of variable.
```

```
   % logical: binary; useful for yes/no or true/false data.
   % char: characters; can store variables (e.g. 'A') or strings.
   % numeric: numbers (integer types, floating-point types); for
 numerical
       % data.
   % table: row/column container of mixed-type data; accessible
 through
       % index or row/column number.
   % cell: array of varying classes; for less-structured data
 packaging.
   % struct: array of varying classes; able to access one or all
 fields or
       %indices with one operation.

% Part 4 (20 pts.)
% Based on the reading MatlabStyle1p5.pdf, give an example variable
 name for each of the variable types you
% identified in Part 3. Then compile (i.e.) save your Markdown file as
 an html file; also commit your changes
% to your specific GIT branch; DO NOT publish though.

   % logical: isNiceOutside
   % char: studentName
   % numeric: studentNo
   % table: warehouseInventory
   % cell: inmate
   % struct: student

% Email your html file to me at dylanmikesell@boisestate.edu with the
 following subject.
% ”GEOS397: HW1 Lastname”
```

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