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% Homework 1
% 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
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   % 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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