
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 a 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 class 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.

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% There is probably an easy way to do this with matrices, 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 retrieval 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.
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    % 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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