%data

%create a 1 dimension array 1 by 8, with random numbers from 1 to 12.

a = randi(12,1,8)

%run "a" in the command window as well as the variables below (w, pi, k, m)

w = 8

pi % it's a constant already stored in matlab, pi greek = 3.14...

k = 2

m = 5

%run this section to store the variable into the workspace

# OPERATORS

% check if pi is smaller than 4. Remember: 1 = true, 0 = false

pi < 4

% check whether k is equal 2 (remember the difference between "=" and "==")

k == 2

%check whether m is bigger or equal to 5

m >= 5

%check where it's true that the vector "a" is equal to w

a == w

% store in a vector "b" the elements of vec "a" that are bigger than 5.

b = a(a>5)

%store in a vector "c" the elements of vec "a" that are smaller or equal to

%5 OR bigger than 8.

c = a(a<= 5 | a>8)

%store in a vector "d" the elements of vec "a" that are bigger than 5 AND

%smaller than 10.

d = a(a>5 & a<10)

# IF, ELSEIF, ELSE

%in a psychological experiment, we studied the interactions among victims

%and perpetrators. Participants were random assigned to 2 conditions.

%Each condition differed by the perpetrator's outcome for each scenario

%presented. condition 1= perpetrator is apprheended,

%cond. 2 = perpetrator got away. We measured the amount of victim blaming

%per each condition.

data = randi(40,20,2) %simulate a random dataset with scores (values) that

%have a maximum value of 40. there will be 20 subjects (rows) and 2

%condititions (columns). column 1 = condit. 1, col2 = cond2

%run the line of code above to have the variable data stored.

make a statement where if the average of the elements of the first column of "data" is bigger than the average of the elements of the 2nd column of "data", then matlab display something, else, it display something else.

%. use the function mean() to calculate the mean.

% HINT: to access the FIRST ROW of a matrix: matrix(1,:). and for columns?

if mean(data(:,1)) > mean(data(:,2)) %add code here

disp("the victim is blamed MORE when the perpetrator is apprehended than when he got away")

else

disp("the victim is blamed LESS or the same amount when the perpetrator got away")

end

%complete the code.

%if a number in the vector "numbers" is smaller than 3, than display "it's

%small". if the number is equal to 3 or 4, then "it's medium". otherwise,

%it's big!

numbers = [0 1 2 3 4 5 6 7 8]

for idx = 1:length(numbers) %for every index from 1 to the end of the length of the vector "numbers"

each\_element = numbers(idx)%each element is = to the element corresponding to the index in the vector "numbers"

if each\_element <3 %COMPLETE: each\_element is smaller than 3.

disp("it's small")

elseif each\_element == 3 | each\_element ==4%complete

disp("it's medium") %complete

else

disp("it's big!") %complete

end

end

%comment the code in group. what is idx? and "each\_element"? what does the

%"for" do?