CVEN 302-501
Computer Applications in Engineering and Construction
Problem Set #2 Introduction to Programming

Date distributed : 9/2/2015
Date due : 9/9/2015 at 8:00 a.m.

Return your solution either in class or in my mail box (8th Floor, CE/TTI) by the date and time shown above. Please show all your work and follow the rules outlined in the course syllabus.

1 Reading

Read Chapters 3 through 5 in Chapman (2016) and answer the following two questions:

• What do logical functions return?

• What is the purpose of a FOR loop?

2 Book Problems

Work book problems 2.6, 2.8, 2.10, 3.16, and 4.6 in the Chapman (2016) textbook.

Work each problem using a new Matlab .m-file, and include the following header at the top of all .m-files for this assignment:

% PROGRAM filename.m
% % This program solves problem x.y in Chapman (2016).
% % Insert a one to two sentence statement of the problem.
% % % Parameters
% % -----------
% % var : type
% % brief description of the variable and list applicable units.
% % % Your Name
% % Assignment Due Date
Be mindful of units and be sure to use the Matlab help if you are not sure what units a built-in Matlab function will use for input and output (i.e., for the $ln(x)$ and $cos(\theta)$ commands). You may want to use polar coordinates in problem 3.16.

A  References