ME 318M – Programming and Engineering Computational Methods

Homework #3

Assigned: September 15th, 2016
Due: September 22nd, 2016

Name: _____ Section Unique Number: _____

UID: _____

Please enclose relevant printouts of the code you wrote and the output of the code in MATLAB's workspace.

Problem 1 (a bit tough – but you can do it):

Ask the user to enter his/her age, with the prompt: "Please tell me how old you are? -> " Then, prompt the user to input a string using a prompt: "You just told me that you are <whatever the user entered> years old. Is that correct y/n ->". If the user enters "y" or "yes", display "Excellent, so you are <whatever the user entered> years old!" If the user enters "n" or "no", display "OK, I'll ask you again and this time, please answer correctly!" and then go back to prompt the user to enter his/her age again, If anything else is entered, display "What? I don't get it!" And then prompt the user to enter his/her age again

Hint: use strcmp command to compare strings, as well as logical operations and (&&) and or (||). Also, please remember how while loop can be used.

Problem 2:

Write a program that will ask the user to enter how many numbers he/she wants to enter into an array, then input those numbers (all via keyboard) and store them into an array. Finally, in that same program, please find the product of all elements in that array and display the following sentence: "The product of all the numbers you entered is <what ever was by your program>."

Problem 3:

Write a program that prompts the user as to how many numbers he/she wants in the array and then accepts that many integers from the user. If the user enters a non-integer, the user is warned about it with a message, "Hey that is not an integer – I'm rounding it up to <what ever that rounded number us>!", stores those numbers in an array, and once all the numbers are entered, it displays it. From this array, create two arrays – one that contains all the even numbers of the original array and another that contains all the odd numbers. Display both.