Homework # 3.

Send solution by email to Milad (milad.naghizadeh@uleth.ca). Please use subject line “Matlab homework”

Note: It is possible to accomplish each of the tasks in multiple ways. Try to find solutions which have the most compact form. Be careful: some tasks could be 'tricky' and impossible to accomplish. In such case explain why this is not a valid task.

1. Write a loop which will be increasing variable i by 5 at each iteration till i reaches 50. Initial value of i is 12.

2. Make a loop in such way that i will be increasing by 5 from 4 up to 30 and by 3 from 30 till up to 50. Tip: this can be easier to do with ‘while’ loop, and with using ‘if’ statement.

3. Make 1 figure with 2 plots in 1 row. First plot will be empty, and second plot will contain bar plot of all values of i from one of the above loops. Tip: create additional variable v which will 'remember' values of i from each iteration.

4. Check if any element of v is not a number

5. Calculate average v

6. Modify one of the above loops in such a way that Matlab will ask you to specify in the command window the initial value of i.

7. Make an interactive plot which will allow you to draw a continuous line with 3 segments

8. Make an array Arr where element Arr(m,n)=i(m)+j(n)*i(m), and i is changing from -5 to 20 and j is changing from -13 to 9.

9. Make 3 dimensional plot to display Arr

10. Check if sum of values in 2nd row is bigger than sum of values in 4th row of Arr

Good luck,

Artur