Homework for lab 3

Make a program for the Mbed controller that will:
a. Execute the code cyclic
b. Use floats
c. Send data from your controller to a PC.
• The data should be read into Matlab. Use serial interface in Matlab
• Build a passive low pass filter, where you can change the resistor and capacitor.
• Build an active lowpass filter consisting of OP-amp and a capacitor in parallel with the feedback resistor. Remember that the µ-Controller only takes signals between 0-3,3 V on the A/D inputs.
Design them for your sampling frequency. Best would be to have it directly on the input pins of board Mbed box.

The idea is to be able to show your sampled data from the controller in a matlab plot, best would be in "real time"

And yes, you are lucky. There are some code on Bilda for the Mbed and for Matlab for you to start with.