Lab A.2: Flow Graph Fundamentals

Points 100

Objective:

To recognize and understand many typical issues and errors in GRC flow graphs. To be able correct the erroneous flow graphs.

Description

Basic rules of any flow graph:

- Wire types must match
- Must include at least 1 source and 1 sink
- A flow graph may not contain loops
- No in or out port may be left disconnected

The attached grc files do not work. It is up to you the student to determine what is wrong with each flow graph. This is an individual assignment unless you are told in class otherwise.

Tasks and Deliverables

1. Repair each flow graph while attempting to preserve its functionality.
    a. You may add, but not delete blocks in a flow graph with the exception of Lab2-4.
    b. You may add or delete any wires.
    c. You may change any settings.
    d. Each file gets progressively more difficult, so it is best to do them in order.
2. For each file:
    a. Include a screen shot of the repaired graph. If the flow graph generates a GUI, give an additional screen shot of that as well.
    b. Include a detailed description for each of the following:
        i. What was wrong?
        ii. How did you fix it?
        iii. Why did you fix it in that way?
        iv. If you couldn't fix the flow graph explain why?
    c. Descriptions should be longer than a one sentence, but not unnecessarily wordy.

Highly recommended tutorials:

- http://www.youtube.com/playlist?list=PL618122BD66C8B3C4&feature=plcp
- https://wiki.gnuradio.org/index.php/TutorialsCoreConcepts
- https://wiki.gnuradio.org/index.php/TutorialsWritePythonApplications