Programming Assignment 3: Due May 14 by 5pm

Write a C program that generates the ASAP schedule or the ALAP schedule of an input dataflow graph. ASAP scheduling and ALAP scheduling were described in class, and are described in Section 5.3 of the textbook. You should do resource constrained scheduling. The input to your program will be a graph and a resource allocation. The output should be a scheduled graph represented by the reservation table.

Your program should make use of the high level synthesis library libHLS. Information on libHLS is available from:
http://www.ece.neu.edu/groups/rpl/libHLS/

To submit your program, put your code in your COE account under the link Courses/ECE3485/PA3. Put the files asap.c and alap.c only! Make sure your files and the PA3 directory are group readable.

If you have questions on this assignment, send email to me@ece.neu.edu.

We will run your code according to the instructions. You will be graded on:

1. How well your code runs (including whether you followed the directions)
2. how well your code works, and
3. the quality of the code and the comments.

Uncommented code will lose points.

Getting Started

Instructions for this assignment can be found in ~libhls/PA3/README on the COE machines.

A skeleton C file for your code can be found in ~libhls/PA3/examples/main.c. The program parses command-line arguments and calls one of the two functions: asap_sched.c or alap_sched.c. Your code goes into these functions.

Important: Your submitted files are expected to reflect your individual effort.