CSE341 Computer Organization Spring 2018   Project 1 Due: 4/13/2018 100pts

Part 1: Write a MIPS program to add two matrices and store the result in memory starting at address given in s2. The matrices are of the size 3 X 2 each. The two matrices are stored starting at two memory locations whose addresses are given in two registers, s0 and s1. Each number in the matrix is represented in signed 2's complement form.

Deliverables:
- The Code with detailed comments
- Flowchart
- Short description of the approach and the program flow
- Simulation input(s) and results

Part 2: For two matrices that are stored at starting addresses given by s3 and s4 respectively, with M1 of size 3 X 4 and M2 is of size 4 X 3; perform the multiplication of M1 X M2 and store the result in memory starting at address given in s5. Each number in the matrix is represented in signed 2's complement form.

Deliverables:
- The Code with detailed comments
- Flowchart
- Short description of the approach and the program flow
- Simulation input(s) and results

Simulation: Use XPSIM to run the MIPS code. Follow the tutorial posted on the website or ask questions in recitation/office hours for instructions on how to use XSPIM. The matrices you will be using will be provided for you in the specified memory addresses pointed to by the specified registers. You will be given skeleton code that will handle this for you.

Submission will be done via the ==*submit_cse341a*== {filename} command on timberlake. Your submission should include your code (with comments), PDF of your flowchart and description of your code.

Academic Integrity: All work on this project must be done INDIVIDUALLY. If you are suspected of an academic integrity violation you will be subject to the repercussions as outlined in the syllabus for this course.

Bonus: (10 points)
Do Part 2 with variable size matrices.   Matrix 1 size M x N Matrix 2 size N x P