Computer Architecture (CSE511/ ECE 511)
Assignment 2

General Note: In assignment 1 you were able to use the available gem5 SimObjects to build your own system and play with it. In this assignment, you will get your hands dirty by diving into the gem5 coding environment and get acquainted with its coding style. You will be able to create your own SimObjects and make it work on the gem5 platform. Hope you enjoy the assignment!!

The steps and deliverables for this assignment are listed below.

1) Create a SimObject that performs Inverse of a matrix. You can specify the matrix elements without taking any user input.

2) Add two DEBUG flags whose functionalities are given below. Each DEBUG flag should also have a proper description/annotation that is displayed on running the simulation.
   a) DEBUG flag "MATRIX" will display the size and elements of the matrices.
   b) DEBUG flag "RESULT" will display the resultant matrix.

3) Now that you have implemented your SimObject and added the required flags, create the configuration script to use your new SimObject. You do not have to add a CPU or caches to the system for this assignment.

4) You should also create a ReadMe file that explains the codes/ scripts submitted.

5) Submit all the simulation script and codes in a zip file with naming convention: <SA2_Rollnumber>.

Resource: http://learning.gem5.org/book/part2/index.html
Note that your implementation should be Cleary explained in the ReadMe file. Bonus marks may be given based on the understanding and explanation to credit any extra effort accordingly.