**Homework 5**

**Instructions:**

* Please type your solutions into a document and convert it into a PDF file. Your solution document should contain your name, student ID, the course name, and homework number.
* Make reasonable assumptions where necessary and clearly state them!
* You may discuss concepts with your classmates. This fosters group learning and improves the class’ progress as a whole. However, make sure to submit your own independent and individual solutions.
* Combine all files of your submission into a single zip file.

**Problem 1**

There are a large number of architectural simulators available. The paper below summarizes the four major architecture simulators widely accepted by the computer architecture research community.

“A Comparison of x86 Computer Architecture Simulators”

Please read the paper and draft one page summery of the paper. Your summery should include a brief description of each simulator, the benefits, functionality support and limitations of simulators in your own world (One page summery with font size of 11)

**Problem 2 (50 pts Extra Credit)**

As a second part of this assignment, install one of these simulators (in your choice). All of these simulators come with few sample benchmarks. Pick two different benchmarks, compile and run them on your target simulator (use X86 ISA). Provide the output of the simulator for the benchmarks. Show that you were able to produce the output for that program. Output examples are IPC, simulated time, cache miss / hit rate.