CS5119 Advanced Architecture Lab
Lab 1

Due: Sunday September 4th, 2022 at 11:59 PM

1 Architecture Level Simulators

A computer architecture simulator is a program that simulates the execution of computer architecture. Computer architecture simulators are used for the following purposes:

- Lowering cost by evaluating hardware designs without building physical hardware systems.

- Enabling access to unobtainable hardware.

- Increasing the precision and volume of computer performance data.

- Introducing abilities that are not normally possible on real hardware such as running code backwards when an error is detected or running in faster-than-real time.

2 To do

1. Familiarize with **gem5**, a popular computer architecture simulator both in industry and research. Follow the instructions in this link to download: www.gem5.org/getting$_s$tarted/.

2. Run the first program available in the link itself to print "Hello World" and generate the performance log.

3. Submit the performance log which can be found in '/gem5/m5out' folder as 'stats.txt' and your detailed interpretation of the log (your insights of the important parameters) by the due date aforementioned.