Instructions for Assignment 3 - Cache Simulation

Setting up of Ubuntu:

For this assignment using ChampSim, you can either use Ubuntu OS or WSL in your Windows which is a Virtual Ubuntu. If you do not want to dual boot your system and you don't plan to use Ubuntu OS in the future then install WSL (Windows Subsystem for Linux).

Installation of Ubuntu:

■ How to Install Ubuntu in the Simplest Possible Way

Installation of WSL:

- 1. Go to Microsoft Store and install Ubuntu (any version after 18.04 can be used)
- Open command prompt and type wsl –install after which you might have to reboot your system
- 3. Open Ubuntu app from more applications

Setting up of ChampSim:

The repository can be found here https://github.com/ChampSim/ChampSim

- 1. Enter the following command in your terminal to clone the ChampSim repository: git clone https://github.com/ChampSim/ChampSim.git
- 2. Follow the instructions regarding installation of dependencies and execution of the simulator in the README provided in the github link
- Checkout the git commands online if you face any problem while modifying the files.

Submission Guidelines:

Submit a zip folder (<Roll_number>_P<Question_number>.zip) containing the following files:

- Report with the plots. The name of the report should be <Roll_number>_P<Question_number>.pdf. Add your system's cache configuration to the report and the command you used to get the details.
- Folder simulation containing the plots and the ENTIRE output of each execution of the ChampSim tool (find out how you can do this cleverly without using copy-paste in the terminal). Name the files appropriately.
- 3. If you did the bonus question then save the code of the particular policy in this folder and it should be ready to use with the **latest ChampSim**.