Lab 8-13

Teams can have up to two students.

Steps 1-4 are the same for all projects. Projects should use Sniper. Different is point 5 (A., B., C., D.)

1. Graphics for benchmarks from Lab3-6 with explanations.
2. Automate multiple runs of the simulator based on a configuration file (benchmark, nrCores, input size, with or without power).
3. Automate multiple reads outputs of the simulator and generate csv-files containing IPC, area, power, real CPU simulation time, nr. instructions simulated.
4. Automate aggregation of results for multiple benchmarks for multiple runs on the same configuration (average(IPC), average(area), average(power), average(real CPU simulation time), average(nr. instructions simulated)). Generate suggestive graphics.
5.
    A. **Integrate a genetic algorithm for single and multiple objectives.**
    B. **Integrate a neural network in order to predict objectives.**
    C. **Integrate interpolation for computing objectives.**
    D. **Integrate different compilation flags for the benchmarks as configuration parameter. Automate running the simulator with: benchmark, nrCores, inputSize, with/without power, compilation flag**

10-20 minute English presentation and Q.A. session.