

## Requirement

In Project 3, you need to use the tuple generator and compare the performance of NO\_MAP, TREE\_MAP, HASH\_MAP, LINHASH\_MAP, BPTREE\_MAP for Select and Join operations.

Performance Evaluation involves plotting milliseconds (ms) of runtime vs. tuples (in units of 10K). Use nanoTime, skip the first iteration (due to JIT) and take the average of 5 iterations.

**Note:** Report the Performance Evaluation for 2 Select and 2 Join test cases.

**Note:** Requires the use of the tuple generator.

## Submission instruction

Put **report.txt** and all **.java** files in a directory **Project3\_LastNameofTheManager** and zip this directory and submit the **.zip** file on ELC. Submission should be made **Only** by the group's manager.

## Grading

- Performance Evaluation for the 4 test cases. (60 points)
- The accurate usage of the tuple generator. (25 points)
- Creation of **report.txt** and balanced programming effort. (10 points)
- All classes and methods must be fully documented. (5 points)
- Bonus Points: The group with the fastest overall implementation will get +6 (gold medal) bonus points, then silver (+4), and then bronze (+2).

## Late submission

- 10 points will be deducted per day late.

-Good Luck-