README.md 7/11/2021

## **FirstProjectOMP**

## **Dependencies**

- CMake 3.9+
- OpenMP
- Python3 3.9.7
- Pipenv

## How to run

Before running the execution make sure that you have the permission as administrator to run the example. To prevent possible errors it has been insert a command that gives right permissions to run the code properly.

1. Extract the folder and then run the following commands:

```
chmod 777 -R *
mkdir build
cd build
cmake ..
```

- 2. Generate executables with make
- 3. To generate measures run
  - make generate\_measuresOn2 to run the execution with time complexity O(n^2)
  - make generate\_measures0n to run the execution with time complexity O(n)
- 4. To extract graphics and tables for speedup and efficiency from the .csv files run
  - make extract\_measures0n2 to run the extraction for the algorithm with time complexity  $O(n^2)$
  - make generate\_measuresOn to run the extraction for the algorithm with time complexity O(n)

Results can be found in the measures/measure or measures/measure0n directory, divided by problem size and the gcc optimization option used.