**BIG DATA COMPUTING 2020/21 – HOMEWORK 2**

Do the tests with the parameters indicated in the first 3 columns of the following table. Fill the table reporting, for each test, 4 values: the approximate average silhouette coefficient of the input clustering (**approxSilhFull**); the time to compute approxSilhFull; the exact silhouette coefficient of the clustering sample (**exactSilhSample**); the time to compute exactSilhSample. The running times must not include the time to load the input file and to compute the sample. The values in the table for Uber\_3\_small.csv must be the average of 3 runs of the same experiment.

**Table to be filled**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Dataset** | **k** | **t** | **approxSilhFull** | **Time (ms) to compute approxSilhFull** | **exactSilhSample** | **Time (ms) to compute exactSilhSample** |
| **Uber\_10\_large.csv** | **10** | **2000** | 0.6284781034778061 | 140525ms | 0.5284811736171426 | 5142ms |
| **Uber\_3\_large.csv** | **3** | **2000** | 0.49262204165251927 | 17583ms | 0.4777229036647352 | 631ms |
| **Uber\_3\_small.csv** | **3** | **40** | 0.8782979000141207 | 80ms | 0.808918819124161 | 4ms |
| **Uber\_3\_small.csv** | **3** | **80** | 0.916279244530017 | 50ms | 0.8204577684646315 | 3ms |
| **Uber\_3\_small.csv** | **3** | **1000** | 0.9148194891306463 | 110ms | 0.9148194891306459 | 33ms |