**PART 3:**

* Empirical results of method() when loop = 1000:

n = 250 🡪 0.006ms

n = 500 🡪 0.009ms

n = 1000 🡪 0.018ms

n = 2000 🡪 0.044ms

* Empirical results of method() when loop = 10:

n = 250 🡪 0.0 ms

n = 500 🡪 0.0 ms

n = 1000 🡪 0.0 ms

n = 2000 🡪 0.1ms

The methodB here in the ComplexityExperiment program is bounded by a linear function. Hence lowering the value of n from 1000 to 10, reduces the execution time i.e. 0 ms for smaller iterations such as n = 250 and n = 500. Execution time then increases with higher value such as n = 2000.