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**Muge Kanuni\*** ([muge.kanuni@boun.edu.tr](mailto:muge.kanuni@boun.edu.tr)), Bogazici University, Department of Mathematics, 34342 Istanbul, Turkey, and **Atabey Kaygun** ([atabey.kaygun@bahcesehir.edu.tr](mailto:atabey.kaygun@bahcesehir.edu.tr)), Bahcesehir University, Department of Mathematics, Istanbul, Turkey. *Global dimensions of some artinian algebras.*

In this article we obtain lower and upper bounds for global dimensions of a class of artinian algebras in terms of global dimensions of a finite subset of their artinian subalgebras. Finding these bounds for the global dimension of an artinian algebra  $A$  is realized via an explicit algorithm we develop. This algorithm is based on a directed graph (not the Auslander-Reiten quiver) we construct, and it allows us to decide whether an artinian algebra has finite global dimension in good number of cases. (Received February 19, 2013)