Abstract

Statistics is a multidisciplinary subject which is used in different domains to mine decisive information from phenomenal volume of data. The aspiration of this paper is to examine the results of two different DSS query optimizers. The design of DSS query optimizer is based upon restricted exhaustive enumeration and a fusion of entropy and genetic algorithm called DSQ_REA and DSQ_ERGA. A five join DSS query is considered for assessing the results of DSQ_REA and DSQ_ERGA. The output of query optimizers is the plan that determine the location where the sub operations of the query would be executed. The objective of query optimizer is to select a query execution path that uses least amount of system resources. The outcomes of DSQ_REA and DSQ_ERGA are statistically analyzed by using different measures of descriptive statistics. Moreover, outlier analysis of the results has been carried out. In addition, the distribution of the results is also examined to reveal the deviation in the different query execution plans generated by DSQ_EA and DSQ_ERGA. With this statistical analysis, one is able to recognize the nature and distribution of different query execution paths generated
with DSQ_REA and DSQ_ERGA.

References


Index Terms

Computer Science

Information Sciences

Keywords

Statistical Analysis, DSS Query Optimizer, Entropy, Genetic Algorithm.