Abstract

Wide range of indexing techniques exists in the world of relational database. Speed of data insertion & retrieval depends on the type of query and available Indexing mechanism. Prevalent mechanisms lack in terms of space-time efficiency and simple structure, for real time applications where the database system needs to handle queries like equality search & range search. Even for simple tasks like getting data by ID, a system imposes heavy resource utilization. For example, Applications such as, telephone directory, transaction information details in banking, status about railway reservation etc., backed with relational database system that employs complex structure like B-Tree or B+-Tree. Hence in such cases, instead of those complex structures, if some lighter technique can be used, which can greatly enhance the overall performance in terms of memory usage and simpler in terms of working &
implementation. The paper presents how the Proposed Technique can significantly impact the overall performance, if applied as Primary Indexing method for range search & equality search queries.

References

Efficient Dynamic Index Structure for Natural Number Intensive Application

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Index Terms

Computer Science

Database Management

System

Keywords

Natural numbers  Dynamic index structure  Indexing  Database management system.