k-dominant Skyline query algorithm for dynamic datasets

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Problems & Ideas

- Most k-dominant Skyline query algorithms are oriented to static datasets
- We proposes a k-dominant Skyline query algorithm for dynamic datasets.

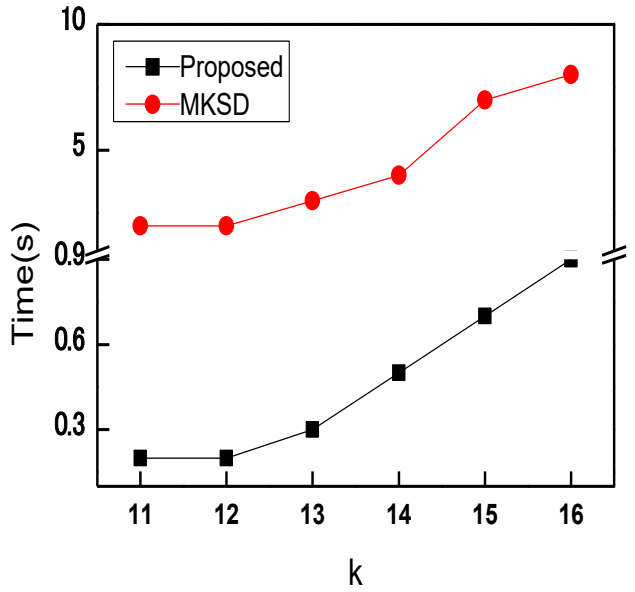
  1 First, we compute the dominant ability of each object and sort objects in descending order by dominant ability.

  2 Then, we maintain an inverted index of the dominant index by k-dominant Skyline point calculation algorithm.

  3 The k-dominant Skyline point of the new data set is obtained by inserting and deleting algorithm.

Main Contributions

- **The query algorithm can effectively improve query efficiency.**



Experimental results of NBA data set