

Updating and Semantic Matching of Different Versions of Database Systems

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ABSTRACT

In this paper, according to the articles and researches presented until 2016, the most widely used methods to match the components of early versions and the purpose of a database, along with their advantages and disadvantages are discussed. Next, matching bugs are especially examined based on string similarity measure using changes in intermediate versions, and finally, a solution is proposed in which information for component changes in intermediate versions can be used, and also semantic similarity measure can be used in addition to string similarity measure so that the probability of error is significantly reduced. To do so, two separate and independent similarity tables are used that are produced based on string and semantic similarities and a final similarity table that combines the elements of two previous tables. Finally, experimental results based on comparison with the other methods for database matching show that our solution has better accuracy and correction.

Keywords: Database, Matcher, Matching, Semantic Similarity.