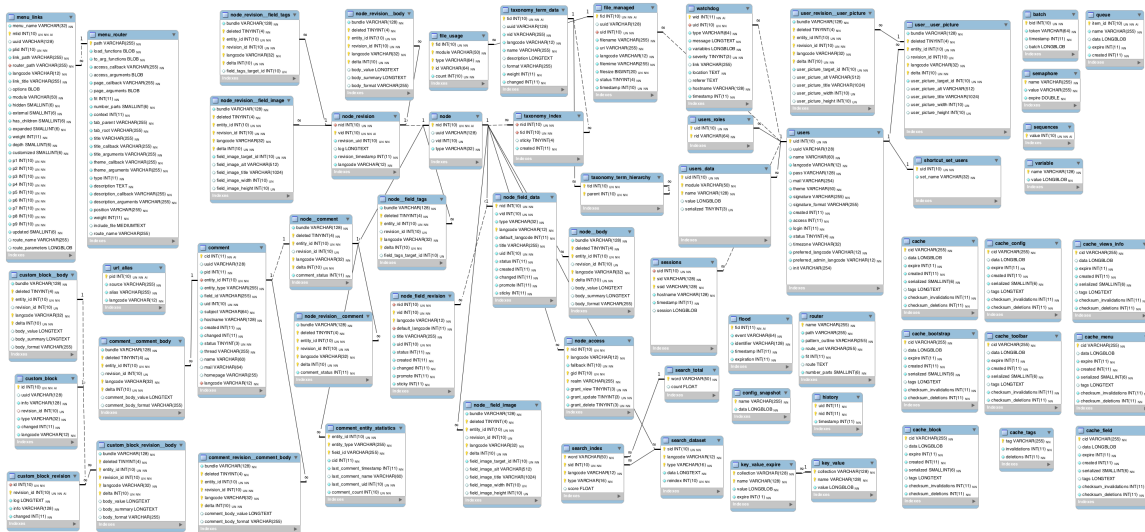




## Algorithm Learning Learning Purely-Relational Queries

Despite the wide-spread popularity of relational databases, writing queries for use in such systems remains to be a time-consuming task. This quickly becomes evident when exploring large databases to discover new relationships in available data. Our goal is to automate this task – that is, to learn to query a chosen database based on sample input-output pairs of row sets.

We have distilled the essence of the problem to a scenario where a high-level schema of the database is available and all table columns are either foreign keys, primary keys, or non-unique indices. We hope to approach the problem from the network point of view, in which way we can make use of the generous graph machinery available for searching and optimisation.



**Who is this for?** Bachelor's or master's students interested in databases, graphs, or algorithm learning. Familiarity with graph algorithms, SQL, and relational databases in general will each be of help at the beginning.

**Interested? Please reach out to us for more details.**

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