Rel **Ruby** (+7NF)

moriq Ruby@関西
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SQL

- なんでこんな言語なんだ？

- **SELECT * FROM r**
- **SELECT * FROM r WHERE c**
- **SELECT name FROM r WHERE c**
- **SELECT ... FROM (SELECT name FROM r WHERE c) JOIN s**

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Tutorial D

- そこで**Tutorial D**ですよ

- **r**
- **r[c]**
- **r[c]{name}**
- **r[c]{name} JOIN s**

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D

- **data language specification**

- **http://en.wikipedia.org/wiki/Tu torial_D**

Rel

- **Tutorial DのJava実装**

- **An Implementation of Date and Darwen's "Tutorial D"**

- **http://dbappbuilder.sourceforge .net/Rel.html**

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Rel Ruby

- **RelをRubyで実装してみた**

- **http://dev.moriq.com/svn/rails/ trunk/rel-ruby/**

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O/R mapper

- **Object Model**
- **Relational Model**
- なんでマッピングなんだ？

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Relation Object

- **Relation.new(heading)**

- **r = Relation.new(id: Integer, name: String)**

Tuple Object

- **Tuple.new(attributes)**

- **r << Tuple.new(id: 1, name: 'matz')**
- **r << {id: 1, name: 'matz'}**

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Relational Ruby

- **RubyでRelational Modelを表現**

- **r**
- **r.select { |t| t.name == 'matz' }**
- **r['name']**
- **r['name'].join(s)**

Ruby(AR) vs DBMS

- **validation**
- **reference constraint**
- **inheritance**
- locking
- logging
- index

- validation
- reference constraint
- inheritance
- **locking**
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- **index**

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- **App + (RelEngine + Storage)**

- **(App + RelEngine) + Storage**

Thank you