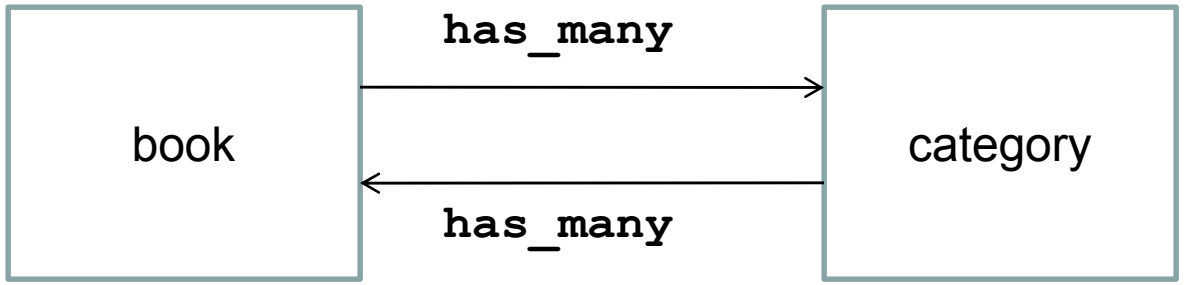
Relationships between tables

Many-to-many



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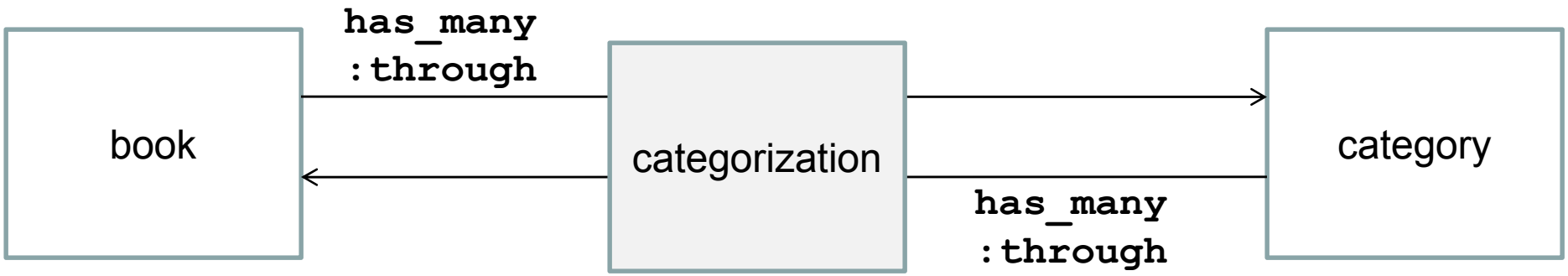
Relationships between tables

Many-to-many



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Viewing tables with Sqliteman

books

	id	title	isbn	creat
1	1	Ruby on Rails For Dummies	12233355566622444	2008-01-22
2	2	Java For Dummies	111222333	2008-01-22

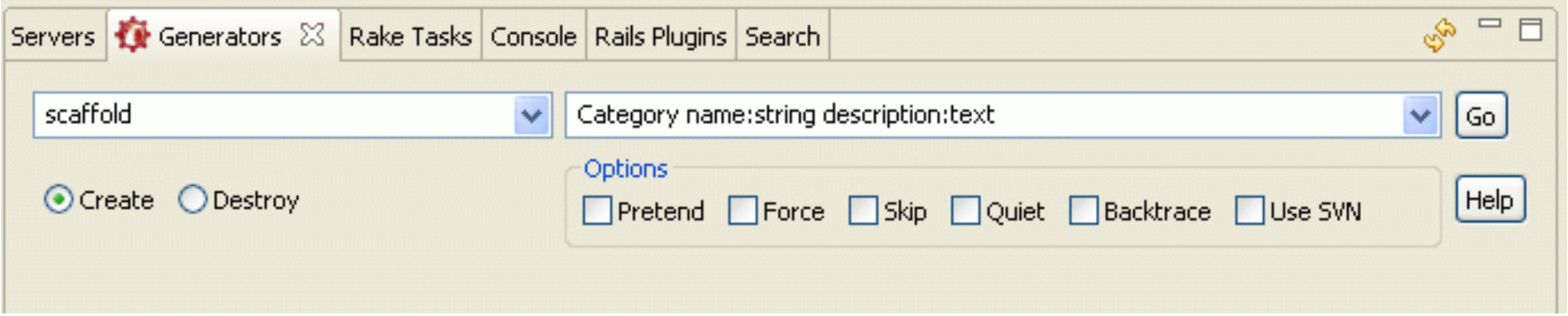
categorizations

	id	book_id	category_id	created_
1	25	1	2	2008-02-03 21
2	26	1	3	2008-02-03 21

categories

	id	name	description	
1	1	Computers	Computer Science, Information Systems, Computer Engineering	2008
2	2	English	Composition, Creative Writing, Literature	2008
3	3	Social Sciences	Psychology, Sociology, Anthropology	2008

Create categories



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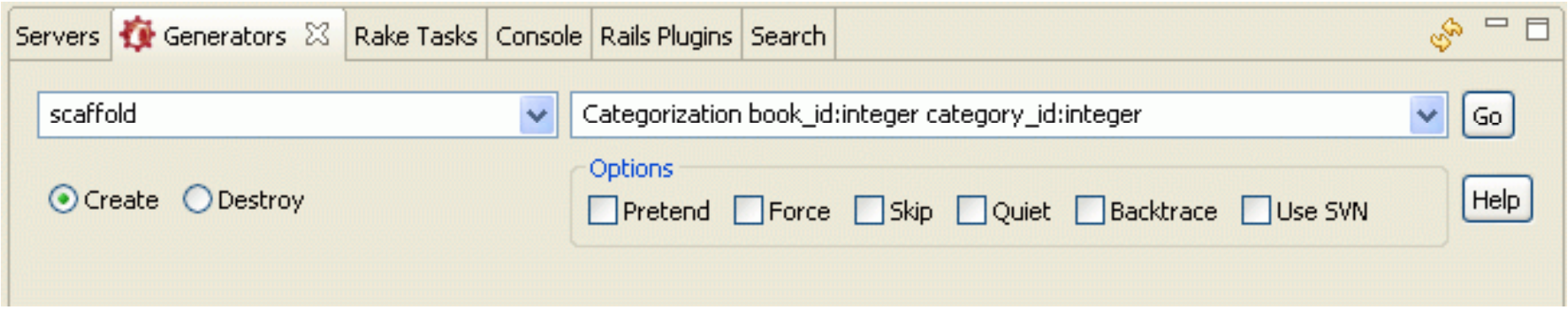
Create categorizations



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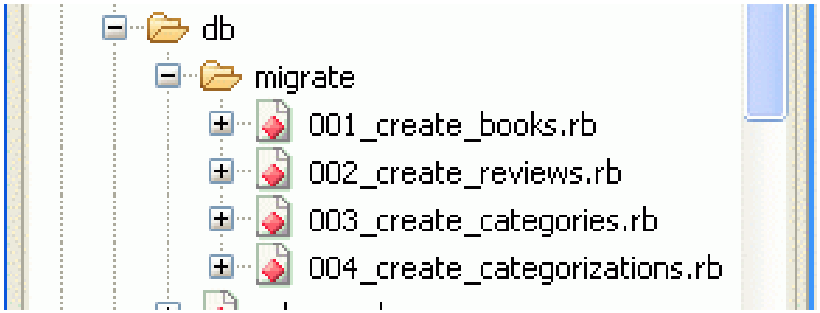
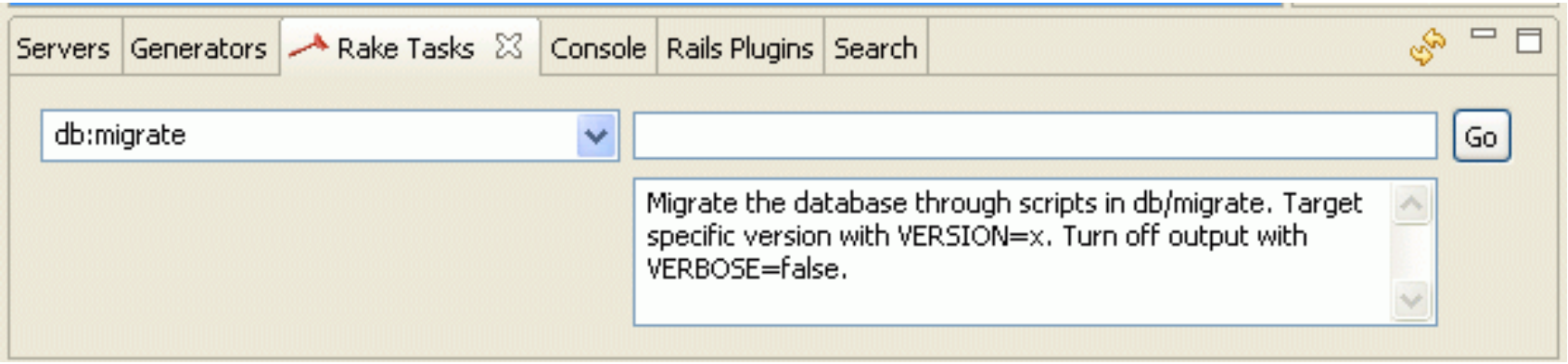
Migrate both at once





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book.rb

```ruby
class Book < ActiveRecord::Base
  validates_presence_of :title
  validates_inclusion_of :isbn, :in => 11111..999999999

  has_many :reviews

  has_many :categorizations
  has_many :categories, through => :categorizations
end
```

categorization.rb

```ruby
class Categorization < ActiveRecord::Base
  belongs_to :book
  belongs_to :category
end
```

category.rb

```ruby
class Category < ActiveRecord::Base
  has_many :categorizations
  has_many :books, through => :categorizations
end
```

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Create categories

Categories: new

http://localhost:3006/categories/new

New category

Name

Computers

Description

Computer Science, Information Systems, Computer Engineering

Categories: index

http://localhost:3006/categories

Listing categories

Name	Description	
Computers	Computer Science, Information Systems, Computer Engineering	Show Edit Destroy
English	Composition, Creative Writing, Literature	Show Edit Destroy
Social Sciences	Psychology, Sociology, Anthropology	Show Edit Destroy

New category

Add a method to

Bookstore\app\controllers\books_controller.rb

books_controller.rb

```
1  class BooksController < ApplicationController
2
3    def set_categories
4      @book = Book.find(params[:id])
5      for category in Category.find(:all)
6        @book.categories.delete(category)
7        if params['category'+category.id.to_s]['isItChecked'] == '1'
8          @book.categories << category
9        end
10     end
11     redirect_to :action => 'show', :id => params[:id]
12   end
13
14   def add_review
15     Book.find(params[:id])
```

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Add code to

Bookstore\app\views\books\show.html.erb

show.html.erb

```
8    <%=h @book.isbn %>
9  </p>
10
11 <% form_tag :action => "set_categories", :id => @book do %>
12   <% @categories = Category.find(:all) %>
13   <b>Categories</b><br />
14   <% @categories.each { |category|
15     isChecked = @book.categories.include?category %>
16     <%= check_box('category'+category.id.to_s, 'isItChecked',
17        { :checked => ((isChecked)?"checked":"unchecked") } ) %>
18        <%= ((isChecked)?"<b>":"") + category.name +
19                                 ((isChecked)?"</b>":"") %><br />
20   <% } %>
21   <%= submit_tag %>
22 <% end %>
23
24 <p>
25   <b>Reviews:</b><br />
```

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Books: show

http://localhost:3007/books/1

Title: Ruby on Rails For Dummies

Isbn: 12233355566622444

Categories

- [ ] Computers
- [ ] English
- [ ] Social Sciences

Save changes

Reviews:

John Q. Public writes "Great!"

Books: show

http://localhost:3007/books/1

Title: Ruby on Rails For Dummies

Isbn: 12233355566622444

Categories

- [x] Computers
- [ ] English
- [ ] Social Sciences

Save changes

Reviews:

John Q. Public writes "Great!"

Books: show

http://localhost:3007/books/1

Title: Ruby on Rails For Dummies

Isbn: 12233355566622444

Categories

- [x] **Computers**
- [ ] English
- [ ] Social Sciences

Save changes

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