

# Ruby on Rails – Essential Commands (With Descriptions)

A beginner-friendly, structured reference for everyday Rails development

## 1. Project Setup & Server

```
rails new my_app
```

Creates a new Rails application with default structure and configuration.

```
cd my_app
```

Moves into the newly created Rails project directory.

```
rails server / rails s
```

Starts the Rails development server on localhost:3000.

## 2. Database Commands

```
rails db:create
```

Creates development and test databases based on database.yml.

```
rails db:migrate
```

Runs pending migrations to update database schema.

```
rails db:rollback
```

Reverts the last database migration.

```
rails db:migrate:status
```

Shows which migrations have been applied.

```
rails db:reset
```

Drops, recreates, and migrates the database (destructive).

## 3. Generators & Scaffolding

```
rails g scaffold Event name:string date:date
```

Generates full CRUD (model, controller, views, routes).

```
rails g model User name:string email:string
```

Creates a model and migration only.

```
rails g controller Events index show
```

Creates a controller with specified actions.

```
rails destroy scaffold Event
```

Removes generated scaffold files.

## 4. Routes

```
rails routes
```

Displays all application routes.

```
rails routes | grep events
```

Filters routes related to a specific resource.

## 5. Rails Console

```
rails console / rails c
```

Opens an interactive Ruby console connected to the app.

```
Event.all
```

Fetches all records from events table.

```
Event.find(1)
```

Finds a record by primary key.

```
Event.count
```

Returns total number of records.

```
Event.create(...)
```

Creates and saves a new record.

## 6. Logs & Debugging

```
tail -f log/development.log
```

Streams real-time Rails logs.

```
rails log:clear
```

Clears Rails log files.

## 7. Bundler & Gems

```
bundle install
```

Installs all gems listed in Gemfile.

```
bundle update
```

Updates installed gems.

```
bundle exec rails server
```

Runs Rails commands within Bundler context.

## 8. Environment & Credentials

```
rails credentials:edit
```

Opens encrypted credentials file.

```
rails env
```

Displays current Rails environment.

```
RAILS_ENV=production rails server
```

Runs server in production mode.

## 9. Must-Remember Commands

```
rails s
```

Start Rails server.

```
rails c
```

Open Rails console.

```
rails g scaffold
```

Generate CRUD quickly.

```
rails db:migrate  
Apply database changes.  
rails routes  
Inspect URL mappings.
```

Tip: Mastering these commands covers 80% of daily Rails development tasks.