

**UNIVERSIDAD NACIONAL AUTÓNOMA DE NICARAGUA  
(UNAN-LEÓN)**

**FACULTAD DE CIENCIAS Y TECNOLOGÍAS.**

**INGENIERIA EN TELEMATICA.**



**COMPONENTE:** SAAS.

**Grupo 2 Telemática**

**INTEGRANTES:**

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**DOCENTE:** Ervin Montes

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**“AÑO LECTIVO 2024”**

## 1. Generar un nuevo proyecto.

```
Hosting@debian ~ $cd Proyectos_RoR
Hosting@debian Proyectos_RoR $rails new App_RoR -T
create
create README.md
create Rakefile
create .ruby-version
create config.ru
create .gitignore
create .gitattributes
create Gemfile
run git init from "."
```

```
create package.json
create app
create app/assets/config/manifest.js
create app/assets/stylesheets/application.css
create app/channels/application_cable/channel.rb
create app/channels/application_cable/connection.rb
create app/controllers/application_controller.rb
create app/helpers/application_helper.rb
create app/javascript/channels/consumer.js
create app/javascript/channels/index.js
create app/javascript/packs/application.js
create app/jobs/application_job.rb
```

### 1.1. Agregar las gemas que se utilizarán en el proyecto, dentro grupo development, test.

```
Hosting@debian Proyectos_RoR $cd App_RoR
Hosting@debian App_RoR $ls
app          config.ru    lib          postcss.config.js  storage
babel.config.js db           log          public             tmp
bin          Gemfile      node_modules Rakefile           vendor
config       Gemfile.lock package.json README.md          yarn.lock
Hosting@debian App_RoR $nano Gemfile
```

### 1.2. El grupo development, test quedará como se muestra en la siguiente figura.

```
group :development, :test do
  # Call 'byebug' anywhere in the code to stop execution and get a debugger console
  gem 'byebug', platforms: [:mri, :mingw, :x64_mingw]
  gem "rspec-rails", "~> 3.7"
  gem 'capybara'
  gem 'database_cleaner'
end
```

### 1.3. Ejecutar el siguiente comando en el terminal para instalar las gemas.

```
Hosting@debian App_RoR $bundle install
Fetching gem metadata from https://rubygems.org/.....
Resolving dependencies...
Fetching public_suffix 6.0.1
Installing public_suffix 6.0.1
Fetching addressable 2.8.7
Installing addressable 2.8.7
Fetching matrix 0.4.2
Installing matrix 0.4.2
Fetching regexp_parser 2.9.2
Installing regexp_parser 2.9.2
Fetching xpath 3.2.0
Installing xpath 3.2.0
Fetching capybara 3.40.0
Installing capybara 3.40.0
Fetching database_cleaner-core 2.0.1
Installing database_cleaner-core 2.0.1
Fetching database_cleaner-active_record 2.2.0
Installing database_cleaner-active_record 2.2.0
Fetching database_cleaner 2.0.2
Installing database_cleaner 2.0.2
Fetching diff-lcs 1.5.1
Installing diff-lcs 1.5.1
Fetching rspec-support 3.9.4
```

### 1.4. Ejecutar el siguiente comando para crear los directorios que rspec necesita para trabajar.

```
Hosting@debian App_RoR $rails g rspec:install
Running via Spring preloader in process 6418
  create .rspec
  create spec
  create spec/spec_helper.rb
  create spec/rails_helper.rb
```

## 2. Configuración de Rspec.

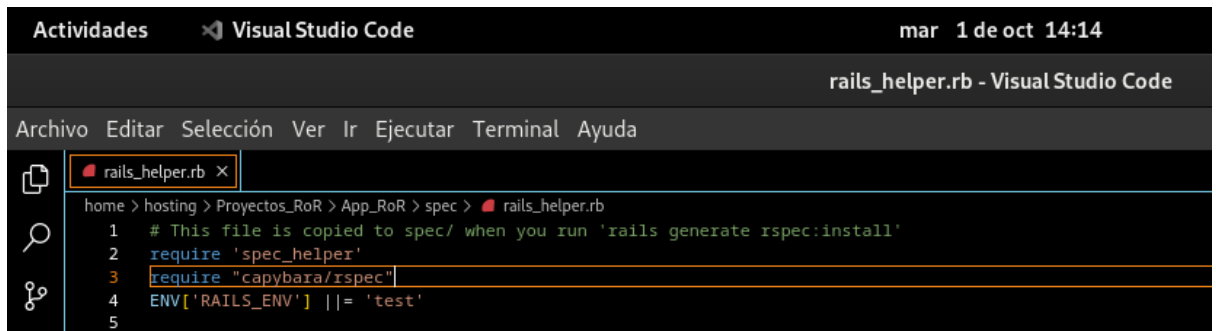
### 2.1. Abrir el archivo config/application.rb y agregar el siguiente código dentro de la clase, en el mismo archivo.

```
module AppRor
  class Application < Rails::Application
    # Initialize configuration defaults for originally generated Rails version.
    config.load_defaults 6.1

    config.generators do |g|
      g.test_framework :rspec,
        fixtures: true,
        view_specs: false,
        helper_specs: false,
        routing_specs: false,
        controller_specs: true,
        request_specs: false
    end

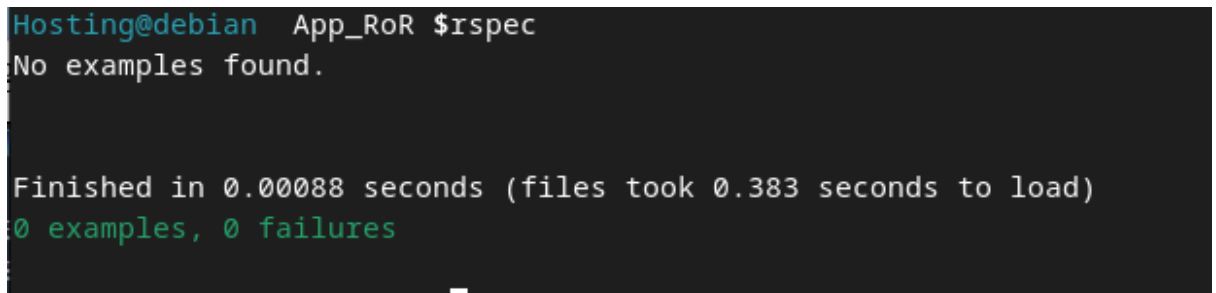
    # These settings can be overridden in specific environments using the files
    # in config/environments, which are processed later.
  end
end
```

2.2. Abrir el archivo rails\_helper.rb y agregar debajo de la línea require 'rspec/rails'.



```
Actividades Visual Studio Code mar 1 de oct 14:14
rails_helper.rb - Visual Studio Code
Archivo Editar Selección Ver Ir Ejecutar Terminal Ayuda
rails_helper.rb x
home > hosting > Proyectos_RoR > App_RoR > spec > rails_helper.rb
1 # This file is copied to spec/ when you run 'rails generate rspec:install'
2 require 'spec_helper'
3 require 'capybara/rspec'
4 ENV['RAILS_ENV'] ||= 'test'
5
```

2.3. Ejecutar el comando y verificar que no muestra ningún mensaje en rojo.

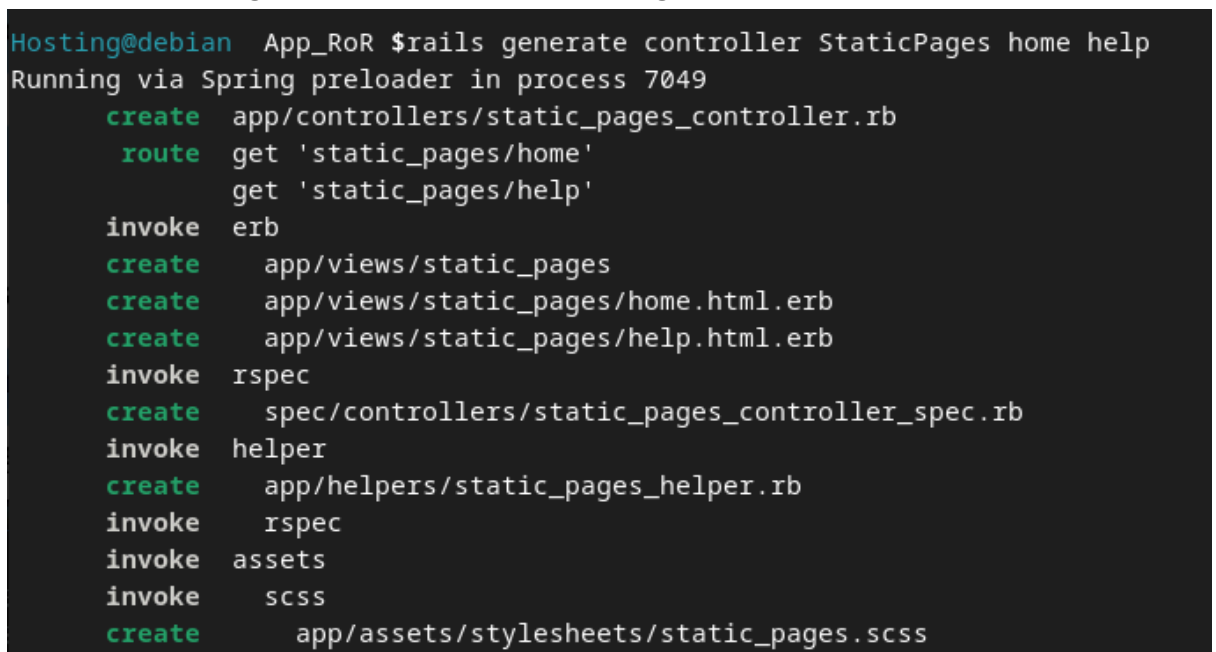


```
Hosting@debian App_RoR $rspec
No examples found.

Finished in 0.00088 seconds (files took 0.383 seconds to load)
0 examples, 0 failures
```

### 3. Static pages

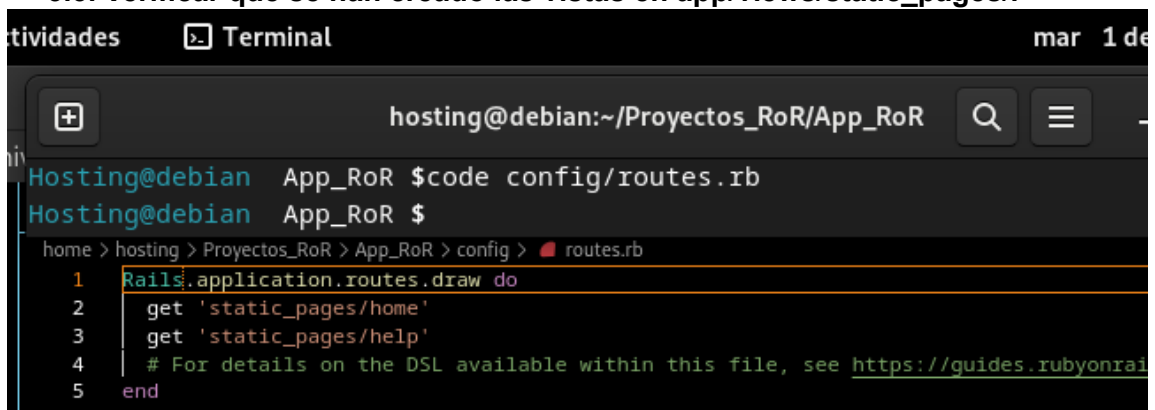
3.1. Para crear páginas estáticas escribir los siguiente en el terminal.



```
Hosting@debian App_RoR $rails generate controller StaticPages home help
Running via Spring preloader in process 7049
create app/controllers/static_pages_controller.rb
route get 'static_pages/home'
get 'static_pages/help'
invoke erb
create app/views/static_pages
create app/views/static_pages/home.html.erb
create app/views/static_pages/help.html.erb
invoke rspec
create spec/controllers/static_pages_controller_spec.rb
invoke helper
create app/helpers/static_pages_helper.rb
invoke rspec
invoke assets
invoke scss
create app/assets/stylesheets/static_pages.scss
```

3.2. Verificar la configuración del archivo routes.rb.

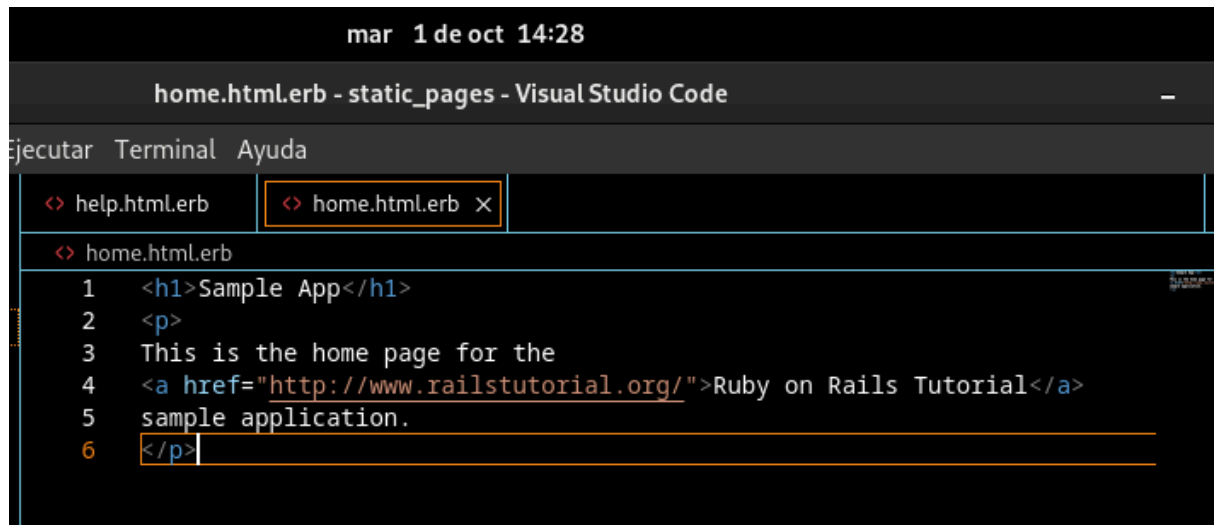
3.3. Verificar que se han creado las vistas en app/views/static\_pages/.



```
Actividades Terminal mar 1 de oct 14:14
hosting@debian:~/Proyectos_RoR/App_RoR
Hosting@debian App_RoR $code config/routes.rb
Hosting@debian App_RoR $
home > hosting > Proyectos_RoR > App_RoR > config > routes.rb
1 Rails.application.routes.draw do
2   get 'static_pages/home'
3   get 'static_pages/help'
4   # For details on the DSL available within this file, see https://guides.rubyonrails.org/routing.html
5 end
```

#### 4. Modificar las vistas.

##### 4.1. Agregar al archivo home.html.erb.



```
mar 1 de oct 14:28
home.html.erb - static_pages - Visual Studio Code
Ejecutar Terminal Ayuda
< help.html.erb < home.html.erb X
< home.html.erb
1 <h1>Sample App</h1>
2 <p>
3 This is the home page for the
4 <a href="http://www.railstutorial.org/">Ruby on Rails Tutorial</a>
5 sample application.
6 </p>
```

##### 4.2. Modificar el archivo help.html.erb.

## 5.2. Probar hacer testing escribiendo en el terminal el comando.

```
Hosting@debian App_RoR $bundle exec rspec spec/controllers/static_pages_controller_spec.rb

..

Deprecation Warnings:

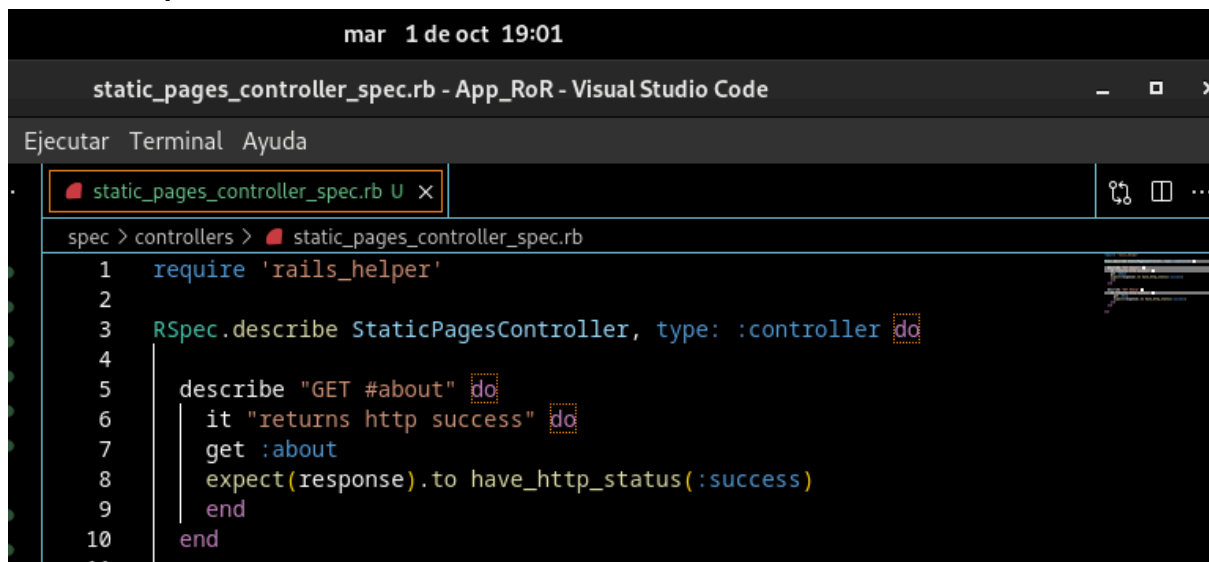
Rails 7.1 has deprecated the singular fixture_path in favour of an array.You should migrate
to plural:

If you need more of the backtrace for any of these deprecations to
identify where to make the necessary changes, you can configure
`config.raise_errors_for_deprecations!`, and it will turn the
deprecation warnings into errors, giving you the full backtrace.

1 deprecation warning total

Finished in 0.3169 seconds (files took 13.37 seconds to load)
2 examples, 0 failures
```

## 5.3. Agregar siguiente código dentro del archivo static\_pages\_controller\_spec.rb del directorio spec/controllers/.



```
mar 1 de oct 19:01

static_pages_controller_spec.rb - App_RoR - Visual Studio Code

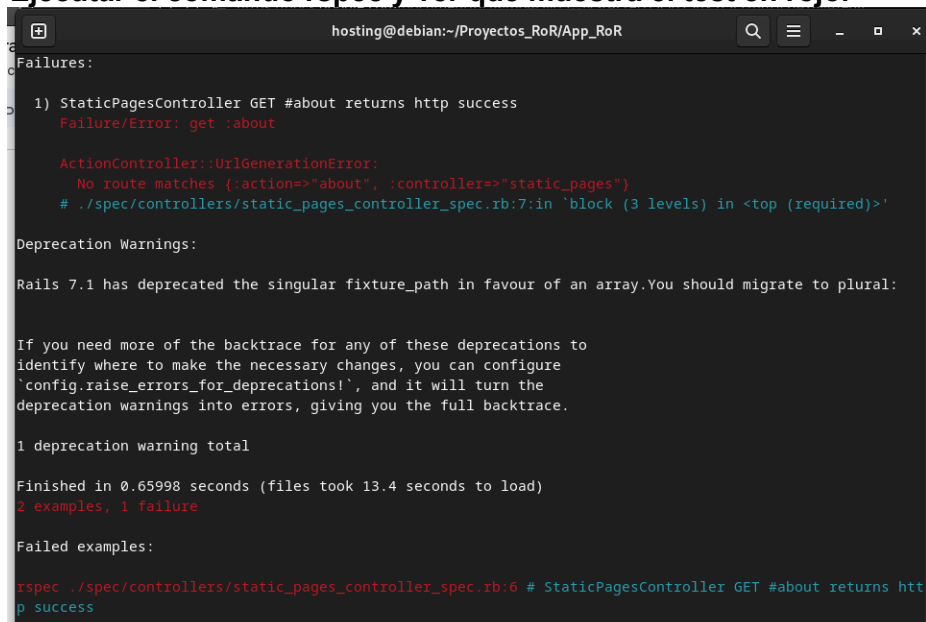
Ejecutar Terminal Ayuda

static_pages_controller_spec.rb U x

spec > controllers > static_pages_controller_spec.rb

1 require 'rails_helper'
2
3 RSpec.describe StaticPagesController, type: :controller do
4
5   describe "GET #about" do
6     it "returns http success" do
7       get :about
8       expect(response).to have_http_status(:success)
9     end
10  end
11
```

## 5.4. Ejecutar el comando rspec y ver que muestra el test en rojo.



```
hosting@debian:~/Proyectos_RoR/App_RoR

Failures:

1) StaticPagesController GET #about returns http success
   Failure/Error: get :about

   ActionController::UrlGenerationError:
     No route matches {:action=>"about", :controller=>"static_pages"}
   # ./spec/controllers/static_pages_controller_spec.rb:7:in `block (3 levels) in <top (required)>'

Deprecation Warnings:

Rails 7.1 has deprecated the singular fixture_path in favour of an array.You should migrate to plural:

If you need more of the backtrace for any of these deprecations to
identify where to make the necessary changes, you can configure
`config.raise_errors_for_deprecations!`, and it will turn the
deprecation warnings into errors, giving you the full backtrace.

1 deprecation warning total

Finished in 0.65998 seconds (files took 13.4 seconds to load)
2 examples, 1 failure

Failed examples:

rspec ./spec/controllers/static_pages_controller_spec.rb:6 # StaticPagesController GET #about returns http
p success
```

### 5.5. Editar el archivo routes.rb y agregar lo siguiente.

```
mar 1 de oct 19:07

routes.rb - App_RoR - Visual Studio Code

ecutar Terminal Ayuda

static_pages_controller_spec.rb U routes.rb U X

config > routes.rb

1 Rails.application.routes.draw do
2   get 'static_pages/home'
3   get 'static_pages/help'
4   get 'static_pages/about'
5   # For details on the DSL available within this file, see https:
6 end
7
```

### 5.6. Ejecutar el test de nuevo.

El mensaje que muestra, es debido a que no existe la acción about que intenta alcanzar el método get.

```
Hosting@debian App_RoR $bundle exec rspec spec/controllers/static_pages_controller_spec.rb
F.

Failures:

  1) StaticPagesController GET #about returns http success
     Failure/Error: get :about

     AbstractController::ActionNotFound:
       The action 'about' could not be found for StaticPagesController
     # ./spec/controllers/static_pages_controller_spec.rb:7:in 'block (3 levels) in <top (required)>'
```

### 5.7. Agregar el método en el archivo controllers/static\_pages\_controller.rb y luego ejecutar el test.

```
static_pages_controller.rb
~/Proyectos_RoR/App_RoR/app/controllers

rails_helper.rb static_pages_controller.rb

class StaticPagesController < ApplicationController
  def home
  end

  def help
  end

  def about
  end
end
```

```

Failures:

  1) StaticPagesController GET #about returns http success
     Failure/Error: get :about

     ActionController::UnknownFormat:
       StaticPagesController#about is missing a template for this request format and variant.

       request.formats: ["text/html"]
       request.variant: []

       NOTE! For XHR/Ajax or API requests, this action would normally respond with 204 No Content: an empty white screen. Since you're loading it in a web browser, we assume that you expected to actually render a template, not nothing, so we're showing an error to be extra-clear. If you expect 204 No Content, carry on. That's what you'll get from an XHR or API request. Give it a shot.
       # ./spec/controllers/static_pages_controller_spec.rb:21:in `block (3 levels) in <top (required)>'

Finished in 0.0522 seconds (files took 4.76 seconds to load)
3 examples, 1 failure

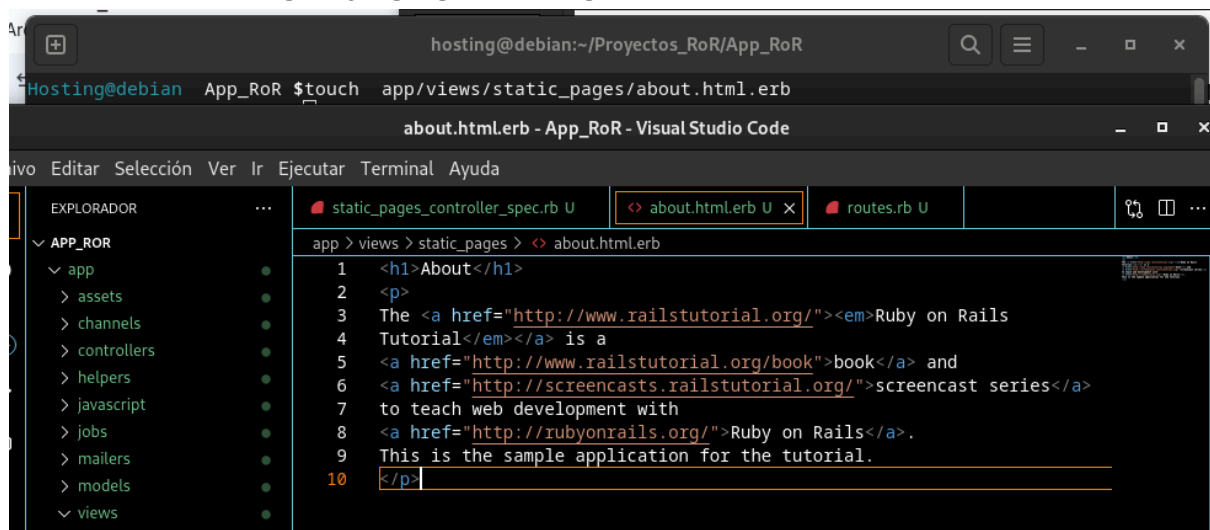
Failed examples:

rspec ./spec/controllers/static_pages_controller_spec.rb:20 # StaticPagesController GET

```

Como se observa en la figura anterior, el mismo test dice el error y que necesita hacer para poder pasar el test y que no muestre los mensajes en color rojo, en este caso no encuentra la vista para la acción creada anteriormente.

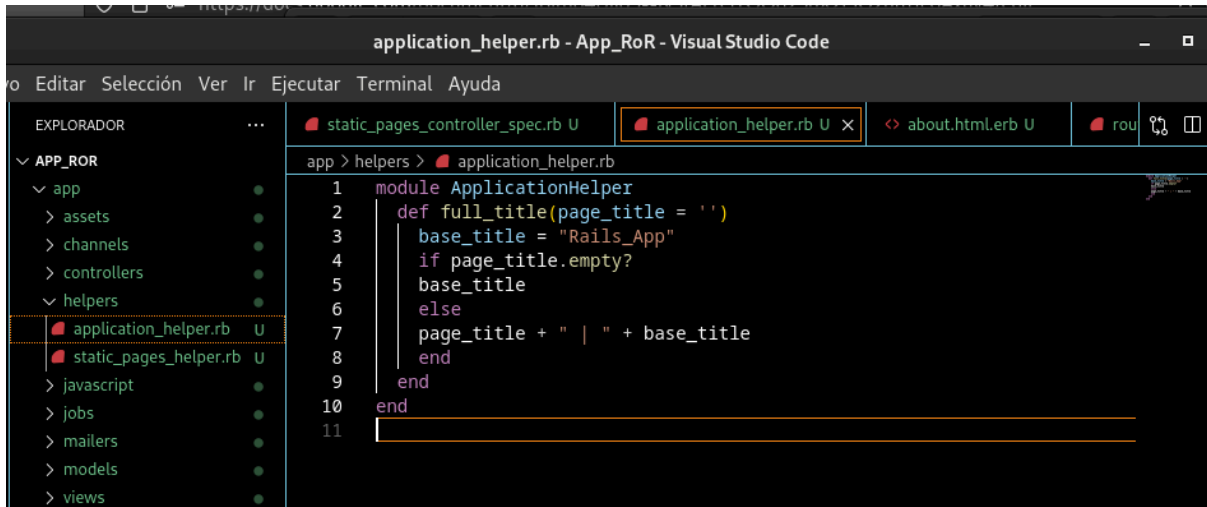
## 5.8. Crear una vista para ese método. Crear el archivo about.html.erb en el directorio app/views/static\_pages/ y agregar el código html.





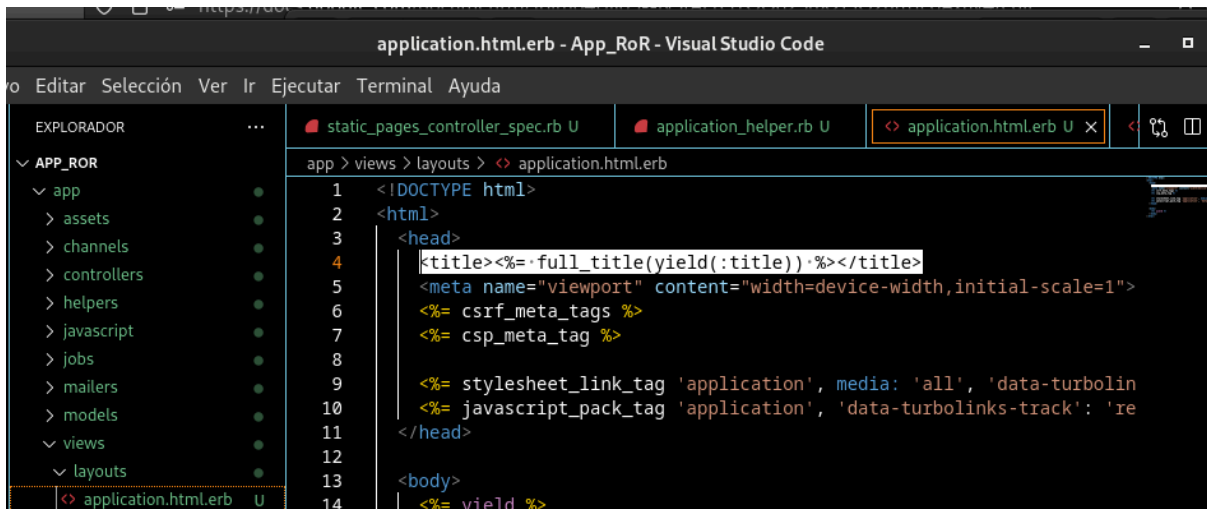
## 6. Configurar el título de la página.

6.1. Para que el título de la página cambie por cada una de las vistas a la que se accede en la aplicación, copiar el código en el archivo `app/helpers/application_helper.rb` dentro del módulo.

A screenshot of the Visual Studio Code editor. The title bar reads "application\_helper.rb - App\_RoR - Visual Studio Code". The Explorer sidebar on the left shows the project structure with "APP\_ROR" expanded, and "app/helpers/application\_helper.rb" selected. The main editor area shows the following Ruby code:

```
1 module ApplicationHelper
2   def full_title(page_title = '')
3     base_title = "Rails_App"
4     if page_title.empty?
5       base_title
6     else
7       page_title + " | " + base_title
8     end
9   end
10 end
11
```

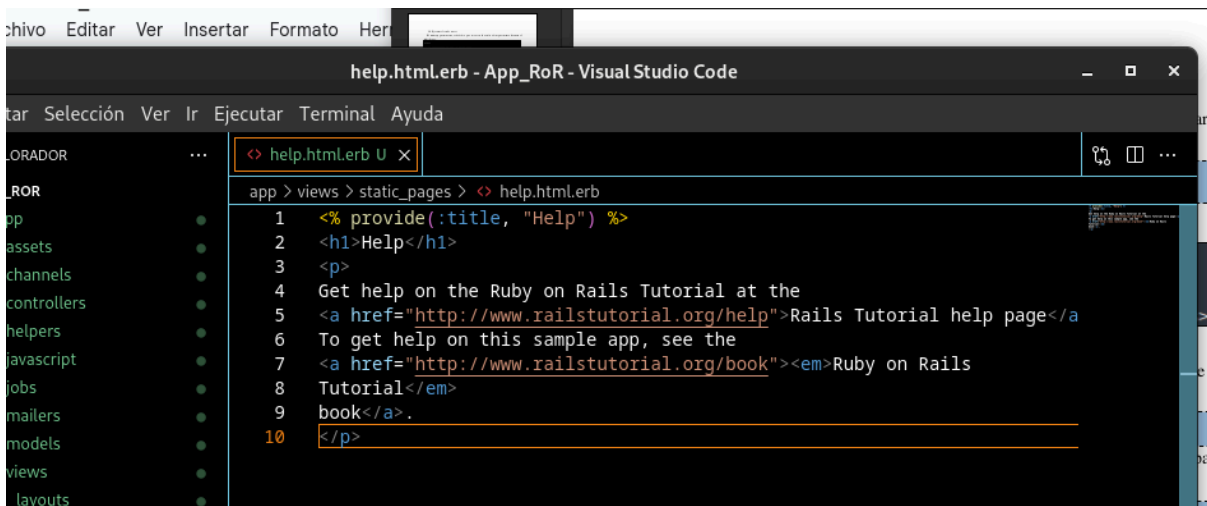
6.2. En el archivo `app/views/layouts/application.html.erb` modificar la línea de la etiqueta `title` por la siguiente.

A screenshot of the Visual Studio Code editor. The title bar reads "application.html.erb - App\_RoR - Visual Studio Code". The Explorer sidebar on the left shows "app/views/layouts/application.html.erb" selected. The main editor area shows the following ERB code:

```
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <title><%= full_title(yield(:title)) -></title>
5     <meta name="viewport" content="width=device-width,initial-scale=1">
6     <%= csrf_meta_tags %>
7     <%= csp_meta_tag %>
8
9     <%= stylesheet_link_tag 'application', media: 'all', 'data-turbolin
10    <%= javascript_pack_tag 'application', 'data-turbolinks-track': 're
11  </head>
12
13  <body>
14    <%= yield %>
```

## 7. Modificar los archivos de las vistas.

7.1. En el archivo `help.html.erb`, agregar la siguiente línea en la parte superior del código.

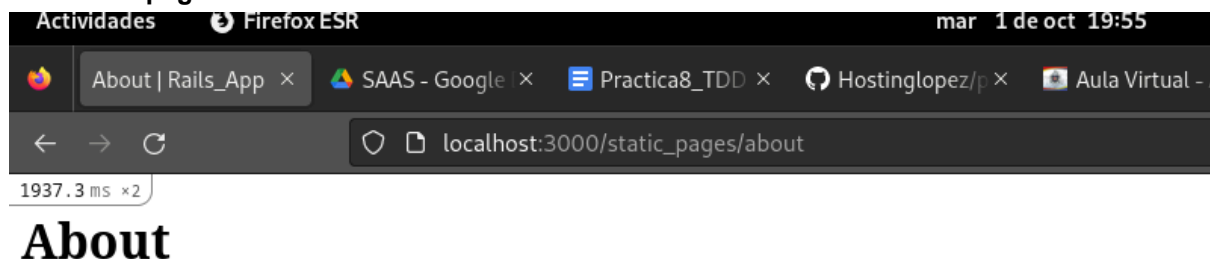
A screenshot of the Visual Studio Code editor. The title bar reads "help.html.erb - App\_RoR - Visual Studio Code". The Explorer sidebar on the left shows "app/views/static\_pages/help.html.erb" selected. The main editor area shows the following ERB code:

```
1 <%= provide(:title, "Help") %>
2 <h1>Help</h1>
3 <p>
4   Get help on the Ruby on Rails Tutorial at the
5   <a href="http://www.railstutorial.org/help">Rails Tutorial help page</a>
6   To get help on this sample app, see the
7   <a href="http://www.railstutorial.org/book"><em>Ruby on Rails
8   Tutorial</em>
9   book</a>.
10 </p>
```

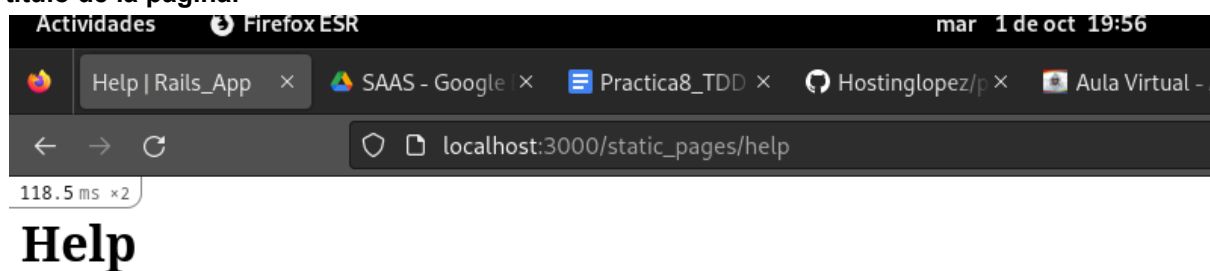
7.2. En el archivo `about.html.erb`, agregar la siguiente línea en la parte superior de todo el código.

```
about.html.erb - App_RoR - Visual Studio Code
Archivo Editar Selección Ver Ir Ejecutar Terminal Ayuda
EXPLORADOR
APP_ROR
  app
    assets
    channels
    controllers
    helpers
    javascript
    jobs
    mailers
    models
    views
    layouts
    static_pages
  help.html.erb U
  about.html.erb U x
app > views > static_pages > about.html.erb
1 <%= provide(:title, "About") %>
2 <h1>About</h1>
3 <p>
4 The <a href="http://www.railstutorial.org/"><em>Ruby on Rails
5 Tutorial</em></a> is a
6 <a href="http://www.railstutorial.org/book">book</a> and
7 <a href="http://screencasts.railstutorial.org/">screencast series</a>
8 to teach web development with
9 <a href="http://rubyonrails.org/">Ruby on Rails</a>.
10 This is the sample application for the tutorial.
11 </p>
```

7.3. Navegar en la dirección `http://localhost:3000/static_pages/about` y verificar que cambia el título de la página.

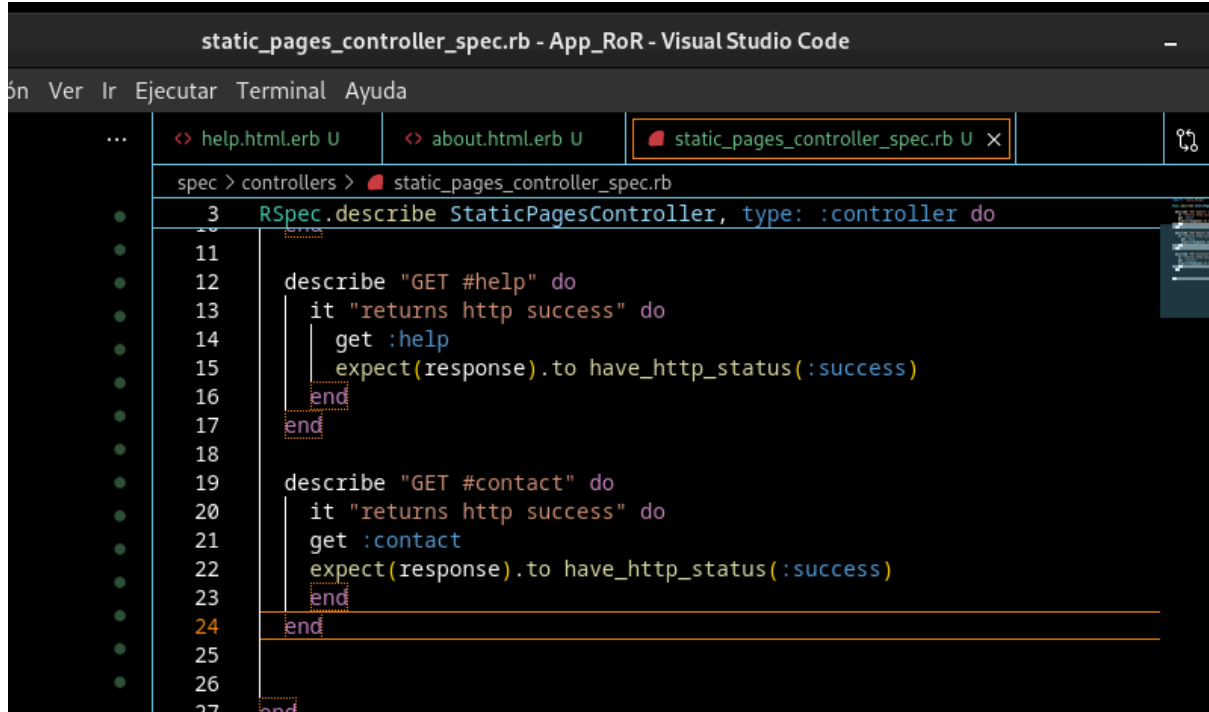


7.4. Navegar en la dirección `http://localhost:3000/static_pages/help` y verificar que cambia el título de la página.



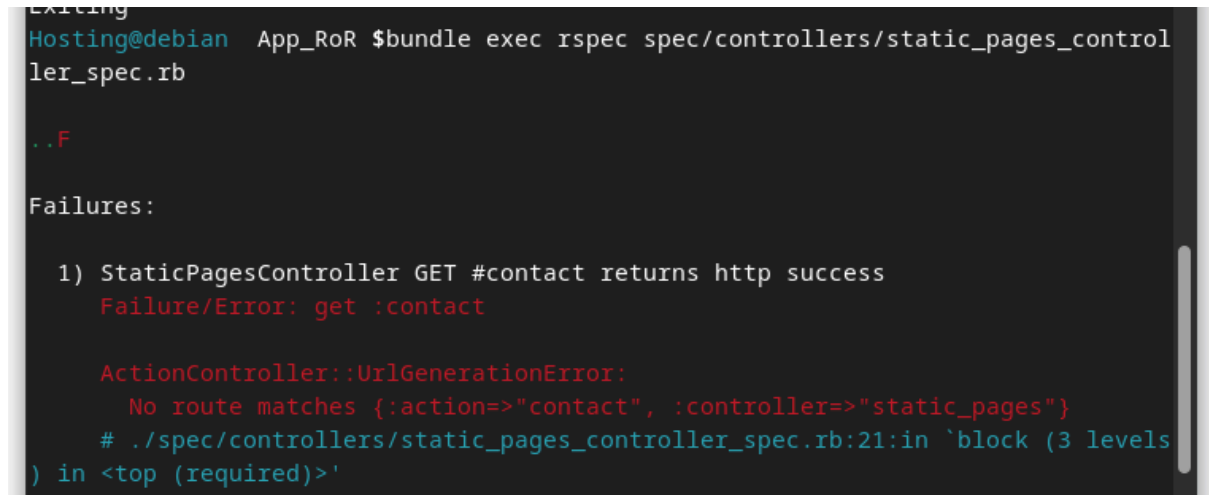
## Ejercicios propuestos para ser entregados al docente

2. Copiar el código del recuadro, en el archivo `static_pages_controller_spec.rb` del directorio `spec/controllers/`.



```
static_pages_controller_spec.rb - App_RoR - Visual Studio Code
bn Ver Ir Ejecutar Terminal Ayuda
... <> help.html.erb U <> about.html.erb U static_pages_controller_spec.rb U X
spec > controllers > static_pages_controller_spec.rb
3 RSpec.describe StaticPagesController, type: :controller do
11
12   describe "GET #help" do
13     it "returns http success" do
14       get :help
15       expect(response).to have_http_status(:success)
16     end
17   end
18
19   describe "GET #contact" do
20     it "returns http success" do
21       get :contact
22       expect(response).to have_http_status(:success)
23     end
24   end
25
26
27 end
```

3. Ejecutar el test y deberá mostrar los siguientes mensajes.



```
Exiting
Hosting@debian App_RoR $bundle exec rspec spec/controllers/static_pages_controller_spec.rb
..F

Failures:

  1) StaticPagesController GET #contact returns http success
     Failure/Error: get :contact

     ActionController::UrlGenerationError:
       No route matches {:action=>"contact", :controller=>"static_pages"}
     # ./spec/controllers/static_pages_controller_spec.rb:21:in `block (3 levels)
in <top (required)>'
```

4. Realizar los mismos pasos que realizo con la página about y hacer que el test pase.

```
Routes.rb - App_RoR - Visual Studio Code
r Ejecutar Terminal Ayuda
... static_pages_controller_spec.rb U static_pages_controller.rb U routes.rb U X
config > routes.rb
1 Rails.application.routes.draw do
2   get 'static_pages/home'
3   get 'static_pages/help'
4   get 'static_pages/about'
5   get 'static_pages/contact'
6   # For details on the DSL available within this file, see https://guid
7 end
8
```

```
static_pages_controller.rb - App_RoR - Visual Studio Code
r Ejecutar Terminal Ayuda
... static_pages_controller_spec.rb U static_pages_controller.rb U X
app > controllers > static_pages_controller.rb
1 class StaticPagesController < ApplicationController
2   def home
3   end
4
5   def help
6   end
7
8   def about
9   end
10
11  def contact
12  end
13
14 end
15
```

```
Hosting@debian App_RoR $ touch app/views/static_pages/contact.html.erb
```

```
contact.html.erb - App_RoR - Visual Studio Code
Archivo Editar Selección Ver Ir Ejecutar Terminal Ayuda
EXPLORADOR ... controller_spec.rb U static_pages_controller.rb U routes.rb U contact.html.erb U X
APP_ROR
  app
    models
    views
    layouts
    static_pages
      about.html.erb U
      contact.html.erb U
      help.html.erb U
      home.html.erb U
1 <h1>Contact</h1>
2 <p>
3 The <a href="http://www.railstutorial.org/"><em>Ruby on Rails
4 Tutorial</em></a> is a
5 <a href="http://www.railstutorial.org/book">book</a> and
6 <a href="http://screencasts.railstutorial.org/">screencast series</a>
7 to teach web development with
8 <a href="http://rubyonrails.org/">Ruby on Rails</a>.
9 This is the sample application for the tutorial.
10 </p>
```

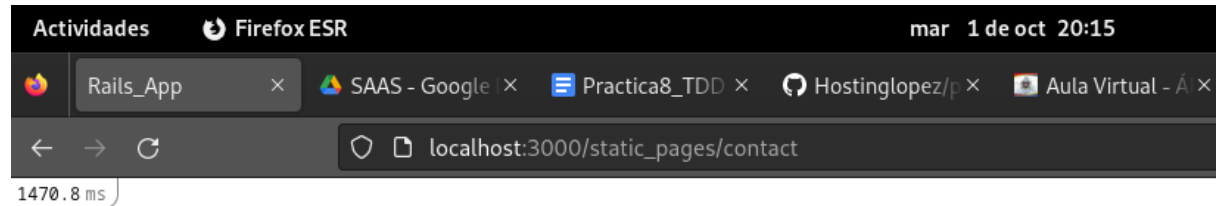
```

Hosting@debian App_RoR $touch app/views/static_pages/contact.html.erb
Hosting@debian App_RoR $bundle exec rspec spec/controllers/static_pages_controller_spec.rb
...
Finished in 0.10288 seconds (files took 3.37 seconds to load)
3 examples, 0 failures

Hosting@debian App_RoR $

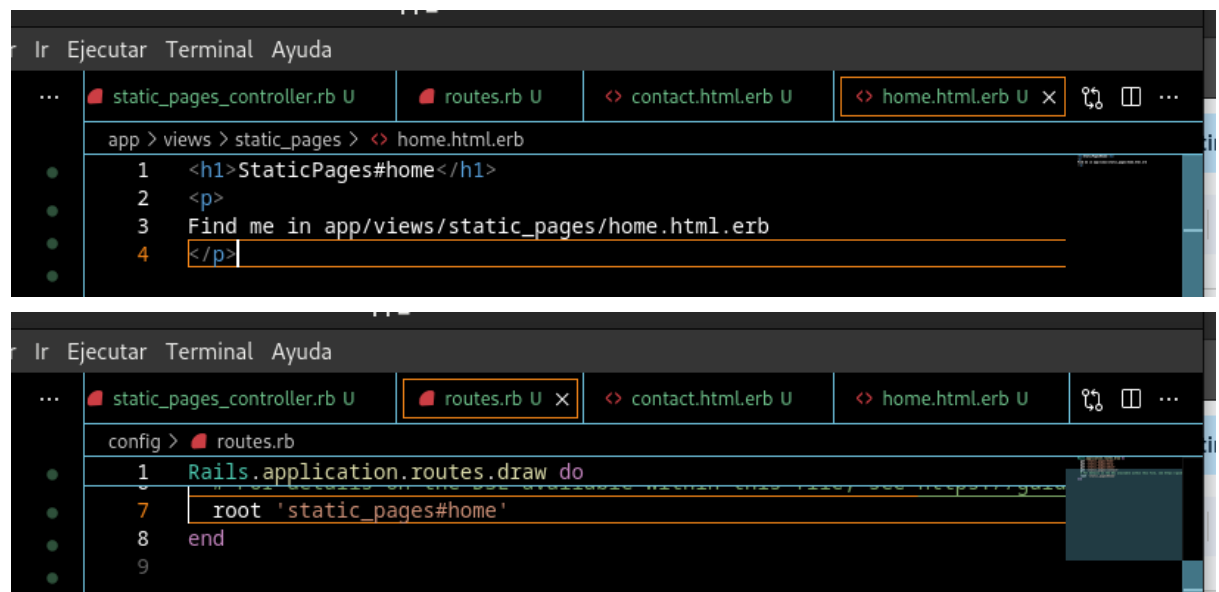
```

## 5. Navegar en la dirección [http://localhost:3000/static\\_pages/contact](http://localhost:3000/static_pages/contact).

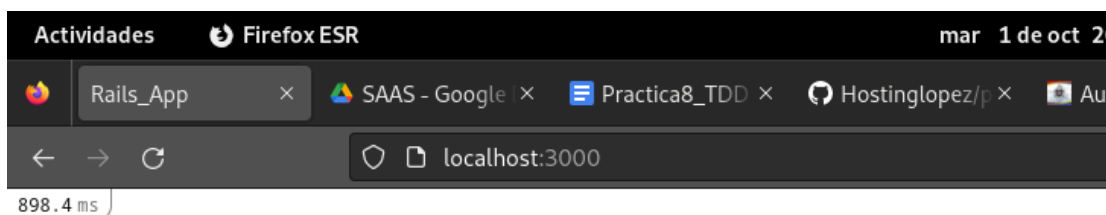


# Contact

6. Configurar el archivo config/routes.rb, para que la página de inicio del proyecto sea el archivo home que se encuentra dentro del directorio static\_pages, realizar la prueba navegando en la dirección localhost:3000, como se muestra en la figura 105.



## NAVEGAMOS A localhost:3000



# StaticPages#home

Find me in app/views/static\_pages/home.html.erb