ShiftCare Technical Challenge

Description

You are tasked with building a command-line application using Ruby. Given a JSON dataset with clients (attached), the application will need to offer two commands:

- Search through all clients and return those with names partially matching a given search query
- Find out if there are any clients with the same email in the dataset, and show those duplicates if any are found.

📦 Submission Guidelines

Please submit your Ruby project either as a compressed `.zip` file or by providing a link to a publicly accessible Git repository.

✅ Important Notes

- A `README.md` file **must be included**, detailing:
  - Setup and usage instructions
  - Assumptions and decisions made
  - Known limitations and areas for future improvement
- The project should be **fully functional** and executable from the command line.
- Ensure your solution includes **automated tests**, including:
  - Edge cases
  - Negative scenarios (not just the happy path)

- Structure your project as you would in a real-world codebase:
  - Do **not** submit a single script file.
  - Organize the codebase using appropriate modules, classes, and directories.
- We understand that time is limited. Please be thoughtful about scope and trade-offs. If you had more time, describe:
  - How you would enhance or refactor the architecture
  - Features or improvements you would prioritise next

Next steps

You'll meet with some of our engineers to add further capabilities to your submission. Please design your application (and tests) expecting to expand on its current features, for example:

- What if we wanted to accept any JSON file, and make the search dynamic i.e. the user specifies which field to search for, rather than always searching by name?
- What if we wanted to offer the same functionality on a REST API? i.e. GET http://localhost:3000/query?q=foo
- What if we wanted to offer this capability at scale?

Dataset

Please find a clients.json file in this url:

appassets02.shiftcare.com/manual/clients.json