Instructions to Run Synthetic Data Generator

Prerequisites: Node.js (which includes npm) installed on your system. If not, see §.

0. (Optional) Install Node.js on macOS

1. Open *Terminal*.

2. Install Homebrew (if you don't already have it):

```
/bin/bash -c "$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/HEAD/i
```

3. Install Node.js using Homebrew:

```
brew install node
```

4. Verify Node.js and npm versions:

```
node -v
npm -v
```

You should see version numbers, indicating a successful installation.

1. Clone or Download the App

- If using GitHub:

```
git clone https://github.com/praggathirr/synthetic-data-generator.git
```

- Or download the code as a ZIP and unzip it into a folder.

2. Navigate into the Project Folder

```
cd synthetic-data-generator
```

3. Install Dependencies

Inside your project folder, install all required packages:

```
npm install
```

This reads your `package.json` and downloads everything the app needs.

4. Start the Development Server

Run Vite's development server:

```
npm run dev
```

A message similar to the following should appear:

```
VITE vX.X.X  ready in XXX ms
Local:   http://127.0.0.1:5173/
Network: http://192.168.X.X:5173/
```

5. Open the App in Your Browser

Navigate to the URL displayed in your terminal (commonly `http://127.0.0.1:5173`) to view the running React Vite app.

6. Use the App

- Add variables, set constraints, define correlations, and click *Generate Data*.

- Preview the generated data (up to 50 rows) and use the plot features.

- Use *Download CSV* if needed.

All Done!

Your React + Vite app is now running on macOS. Enjoy!