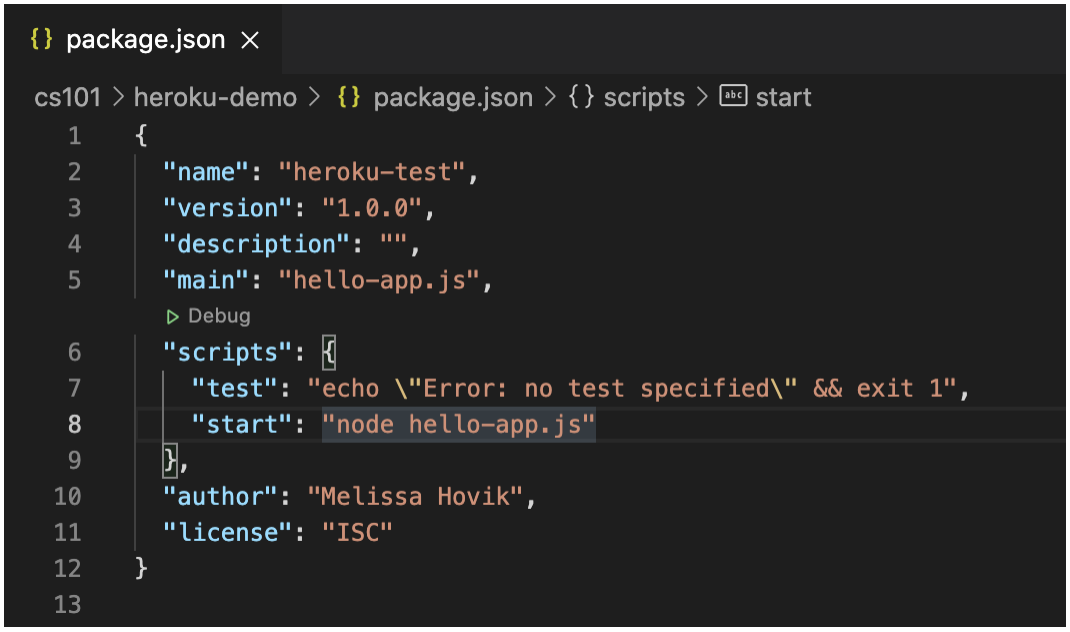
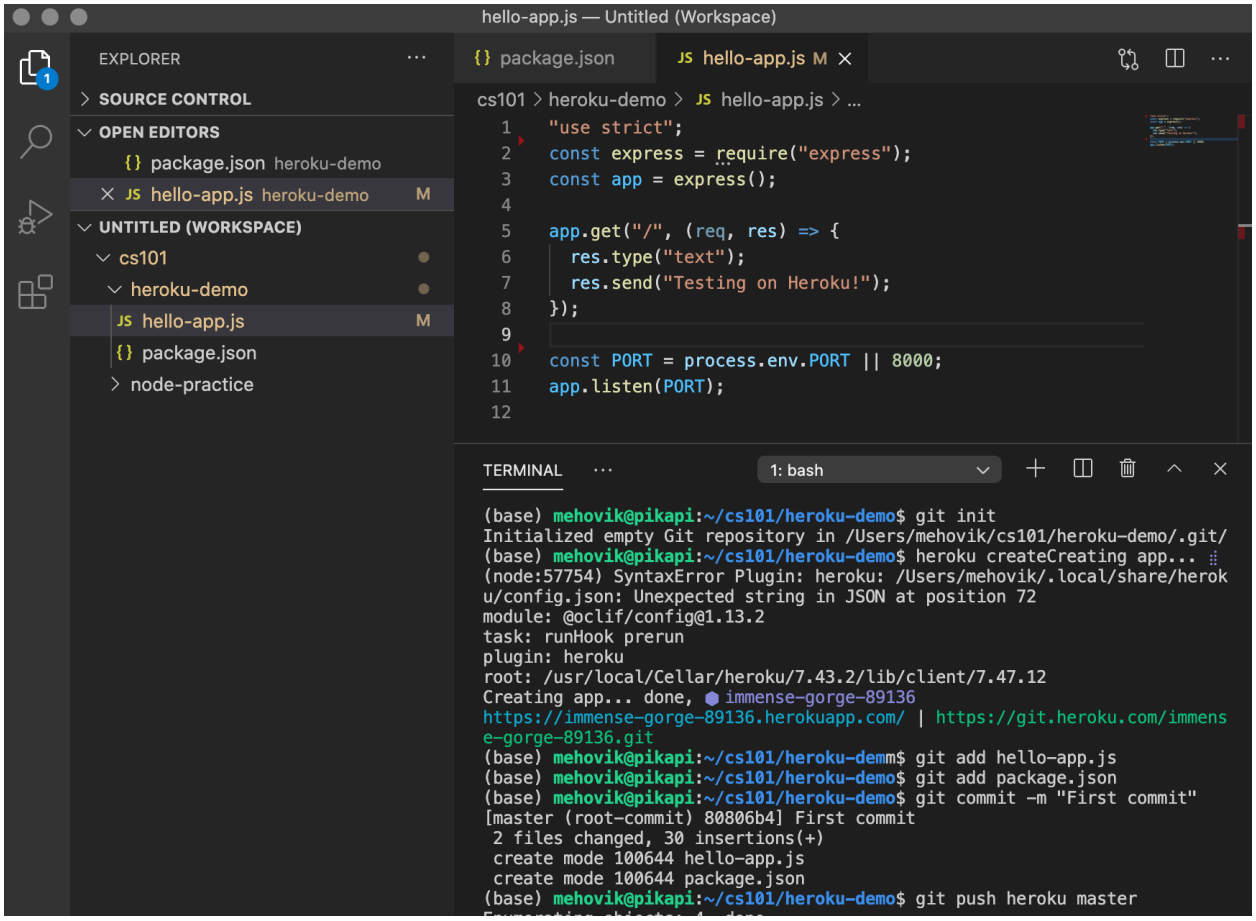
Deploying a Node.js App to Heroku

1. Create a Heroku account (free).
2. Install the Heroku CLI (Command Line Interface) to use the `heroku` command to create, monitor, and deploy your Heroku app (usually requires internet connection).
3. In your `package.json`, specify the node script to run on the server (similar to the one you would run in the command line locally, but use `node` instead of `nodemon`). To do so, add `"start" : "node <app-file-name>"` to the `"scripts"` as seen on line 8 below:

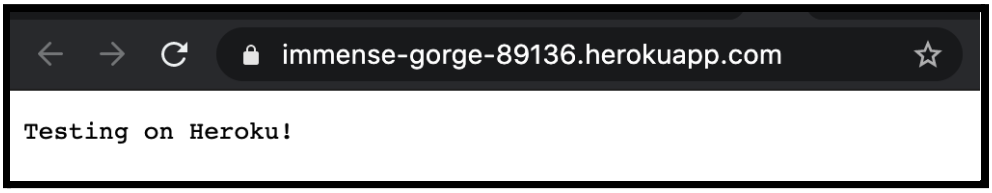


4. Initialize your Heroku repository. Heroku makes use of git to manage your files. However, we need to create this repository first.
    a. Open your terminal in your project directory (type ls to make sure your files are there) and type `git init` to create the necessary files for managing the Heroku repository.
    b. For the first time you create a Heroku app, run `heroku login` to authenticate your user/pass locally. **This is a one-time step.** *Note that if you are using Windows and get stuck at the login screen, you may need to use the Windows Command Prompt instead of Git Bash. See Appendix at bottom of this document for equivalent screenshots.*
    c. Run `heroku create`. This will tie your local repository to Heroku and allow you to push your files.
    d. Add your files (**but not any `node_modules`** - these will be installed on Heroku using your `package.json`) with `git add` and then commit with `git commit -m "commit message"`.



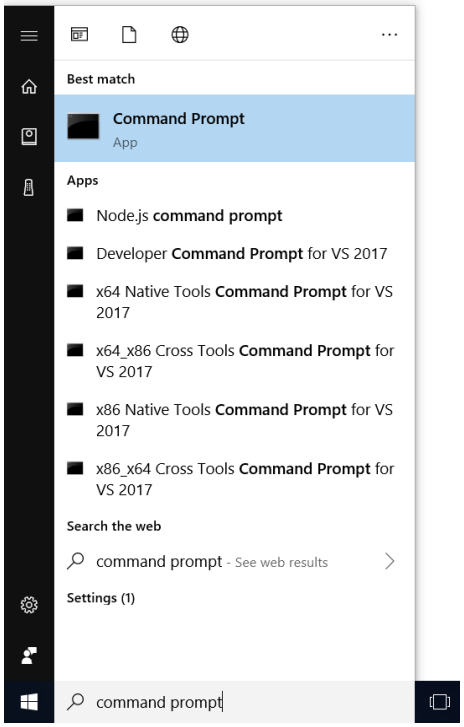
5. Push the repository to heroku with `git push heroku master`. A link will be printed to the terminal once your site is online. This is the URL to your web service (and you can also `fetch` from it!) To easily open within the current directory, run: `heroku open`.

```
remote: -----> Launching...
remote:        Released v3
remote:        https://hidden-wildwood-24595.herokuapp.com/ deployed to Heroku
remote:
remote: Verifying deploy... done.
To https://git.heroku.com/hidden-wildwood-24595.git
 * [new branch]      master -> master
(base) mehovik@pikapi ~/Desktop/cse154/heroku-test (master) $ heroku open
```

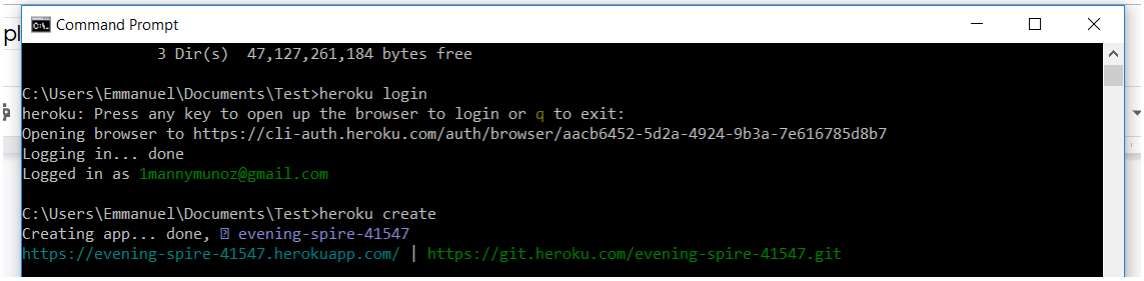


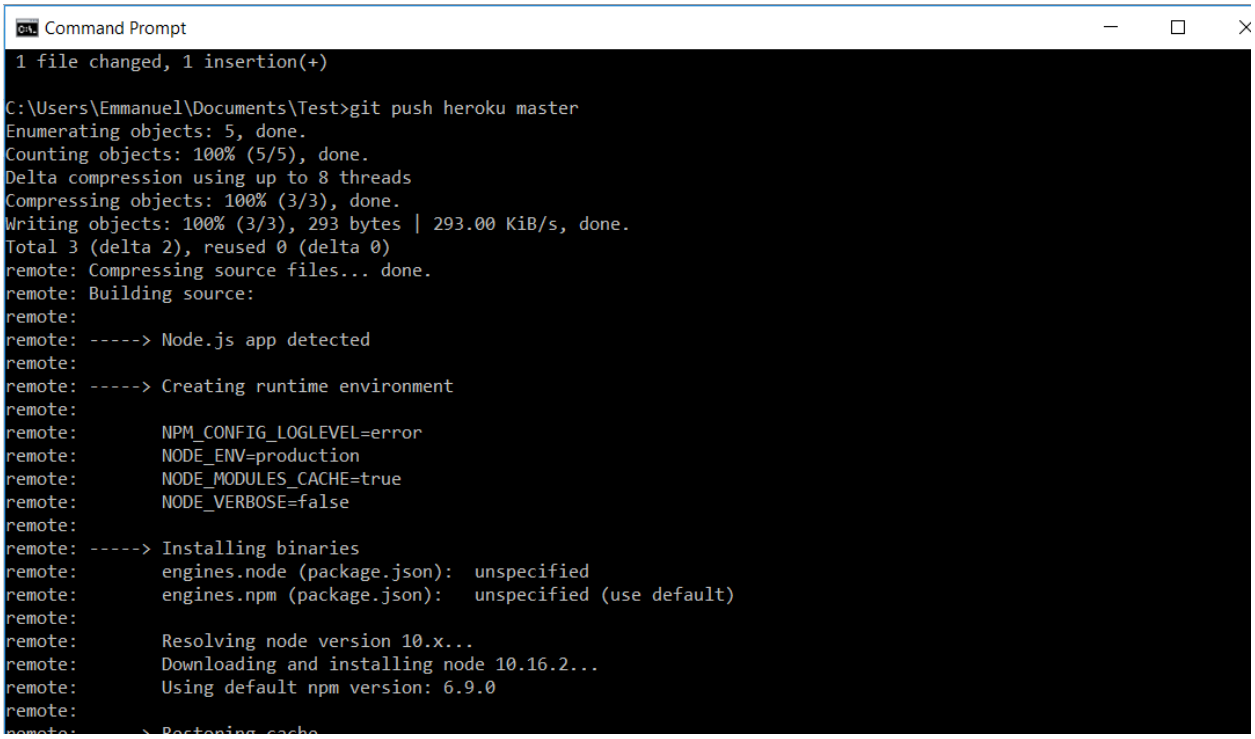
Appendix: Screenshots using Windows Command Prompt

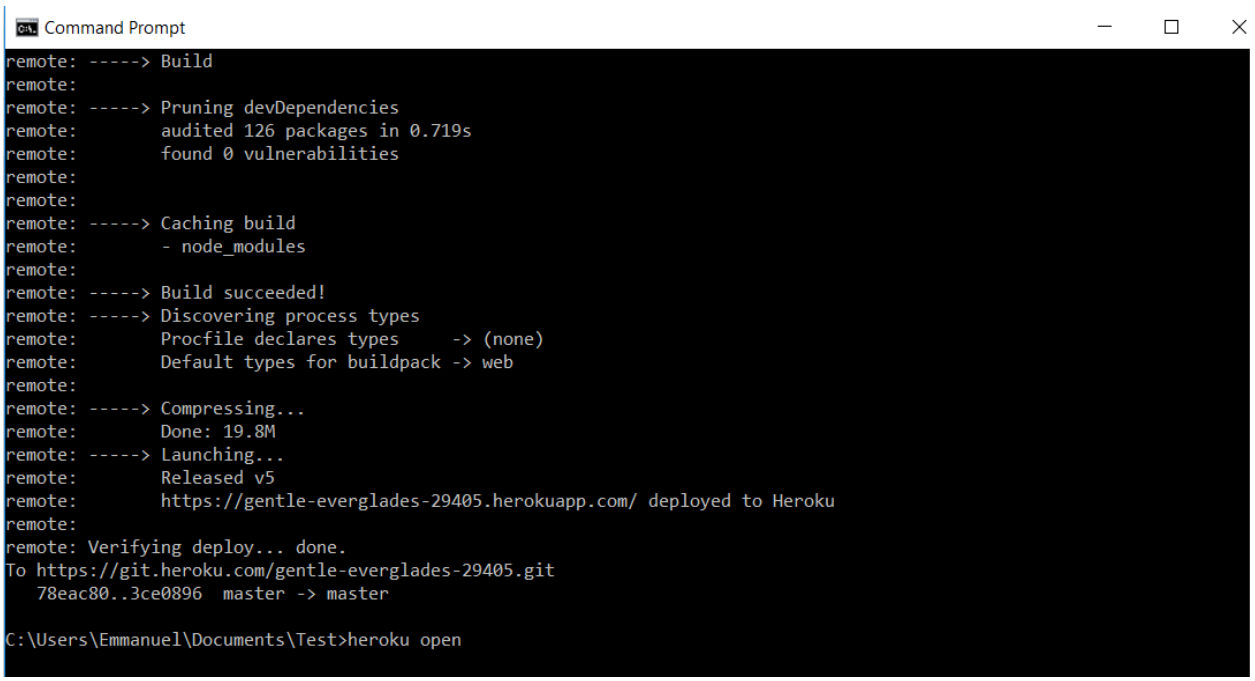
To find the Command Prompt:



Screenshots of equivalent steps using Command Prompt in main document:




Command Prompt
1 file changed, 1 insertion(+)
C:\Users\Emmanuel\Documents\Test>git push heroku master
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 8 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 293 bytes | 293.00 KiB/s, done.
Total 3 (delta 2), reused 0 (delta 0)
remote: Compressing source files... done.
remote: Building source:
remote:
remote: -----> Node.js app detected
remote:
remote: -----> Creating runtime environment
remote:
remote: NPM_CONFIG_LOGLEVEL=error
remote: NODE_ENV=production
remote: NODE_MODULES_CACHE=true
remote: NODE_VERBOSE=false
remote:
remote: -----> Installing binaries
remote: engines.node (package.json): unspecified
remote: engines.npm (package.json): unspecified (use default)
remote:
remote: Resolving node version 10.x...
remote: Downloading and installing node 10.16.2...
remote: Using default npm version: 6.9.0
remote:


Command Prompt
remote: -----> Build
remote:
remote: -----> Pruning devDependencies
remote: audited 126 packages in 0.719s
remote: found 0 vulnerabilities
remote:
remote:
remote: -----> Caching build
remote: - node_modules
remote:
remote: -----> Build succeeded!
remote: -----> Discovering process types
remote: Procfile declares types -> (none)
remote: Default types for buildpack -> web
remote:
remote: -----> Compressing...
remote: Done: 19.8M
remote: -----> Launching...
remote: Released v5
remote: https://gentle-everglades-29405.herokuapp.com/ deployed to Heroku
remote:
remote: Verifying deploy... done.
To https://git.heroku.com/gentle-everglades-29405.git
78eac80..3ce0896 master -> master
C:\Users\Emmanuel\Documents\Test>heroku open