

Programming in C

for macOS Users

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Installing Xcode

1. Download Xcode from the Mac App Store

The screenshot shows the Mac App Store interface. The top navigation bar includes 'App Store', 'Edit', 'Store', 'Window', and 'Help'. The status bar at the top right shows connectivity, battery level (100%), and the date and time (Thu 1:47 PM). On the left, a sidebar lists categories: Discover, Arcade, Create, Work, Play, Develop (which is selected), and Categories/Updates.

The main content area displays the 'Xcode' developer tools by Apple. It features a blue icon with a hammer and wrench, a rating of 3.3 stars from 7.1K ratings, and a position of #1 in Developer Tools. A large 'OPEN' button is prominent on the right. To the right of the main card, it says '4+' and 'Age'. Below the main card, there's a 'What's New' section detailing Xcode 12.1 features like Swift 5.3 and various iOS/macOS/watchOS versions, along with a 'Version History' link. Two preview screenshots of Xcode's interface are shown below, illustrating its code editor and simulator.

Xcode
Developer Tools
Apple

3.3 ★★★★☆ 7.1K Ratings #1 Developer Tools

4+ Age

What's New

Xcode 12.1 includes Swift 5.3 and SDKs for iOS 14.1, iPadOS 14.1, tvOS 14, watchOS 7, and macOS Catalina Platform features

more

Version History 1w ago Version 12.1

Preview

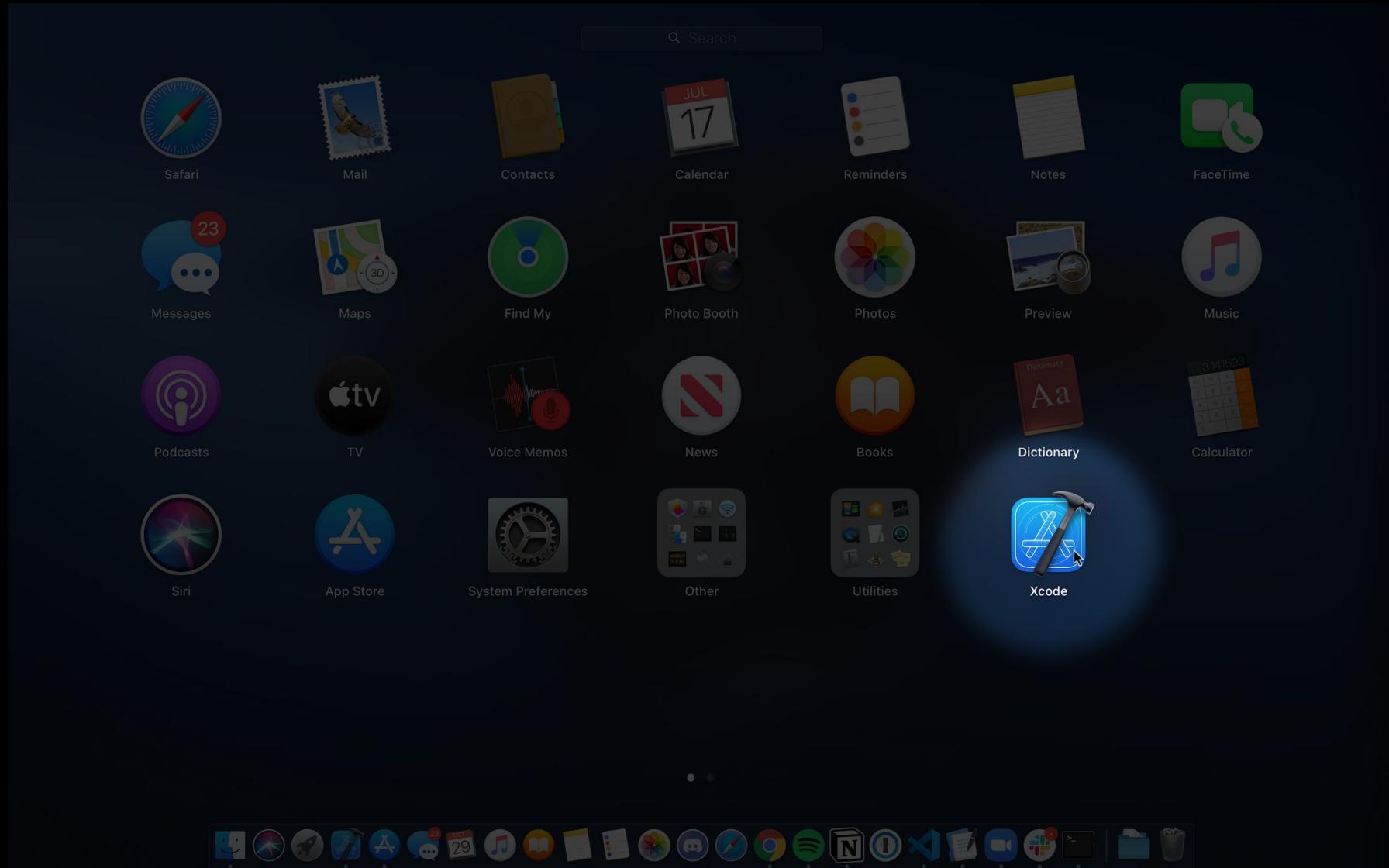
Mac

Xcode includes everything developers need to create great applications for Mac, iPhone, iPad, Apple TV, and Apple Watch. Xcode provides developers a

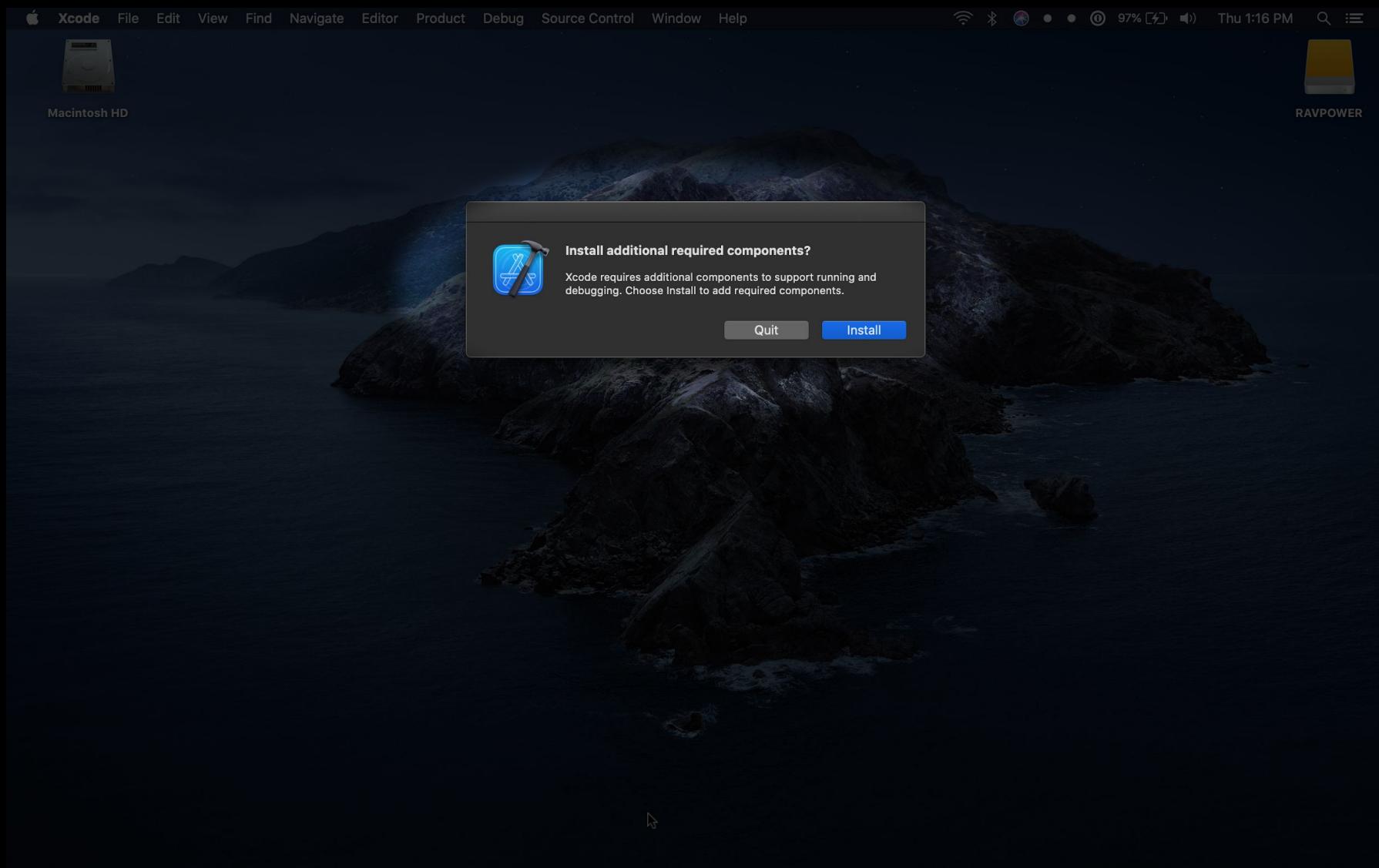
Apple

Using Xcode for Programming in C

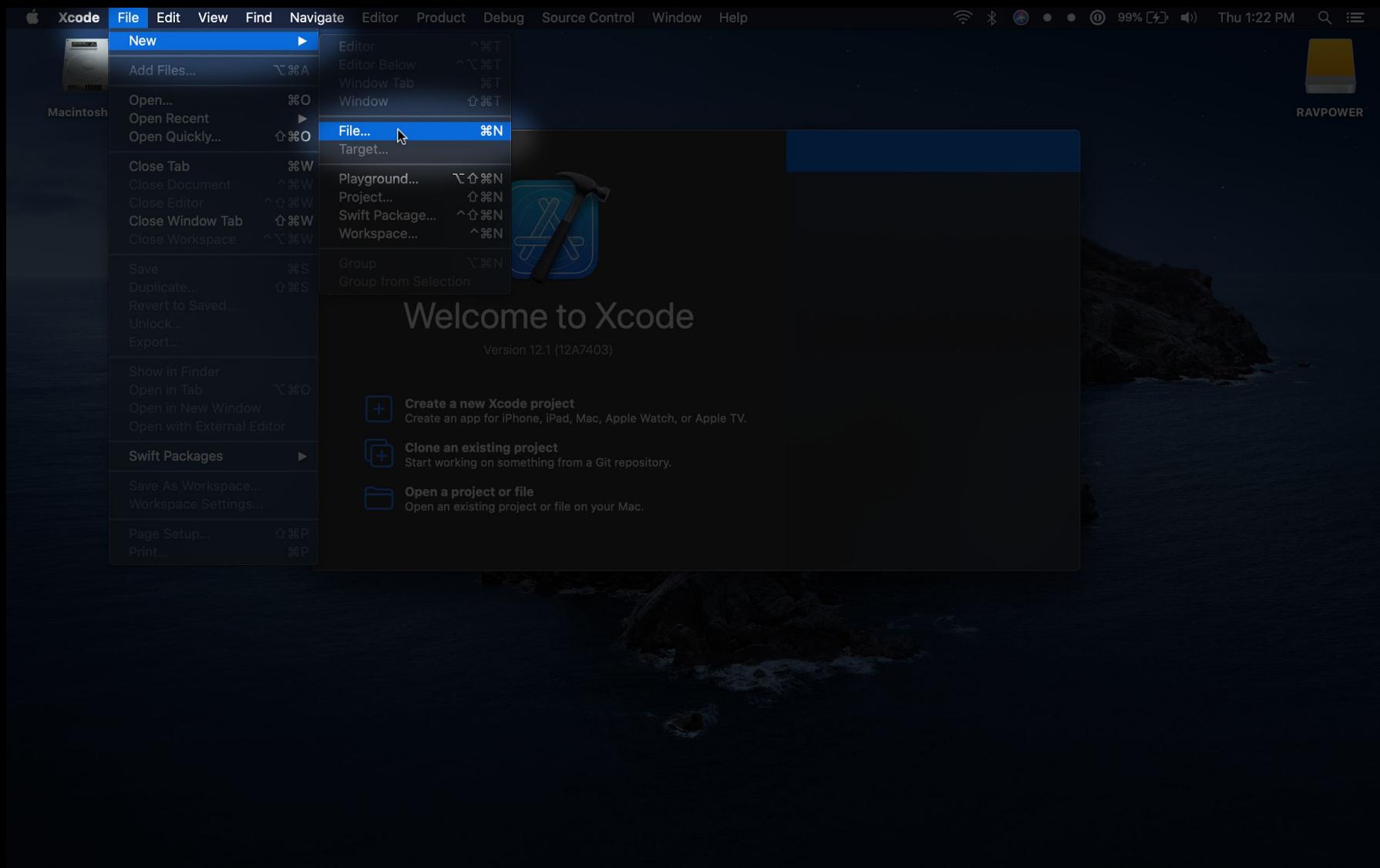
1. Open Xcode (from Launchpad or Applications)



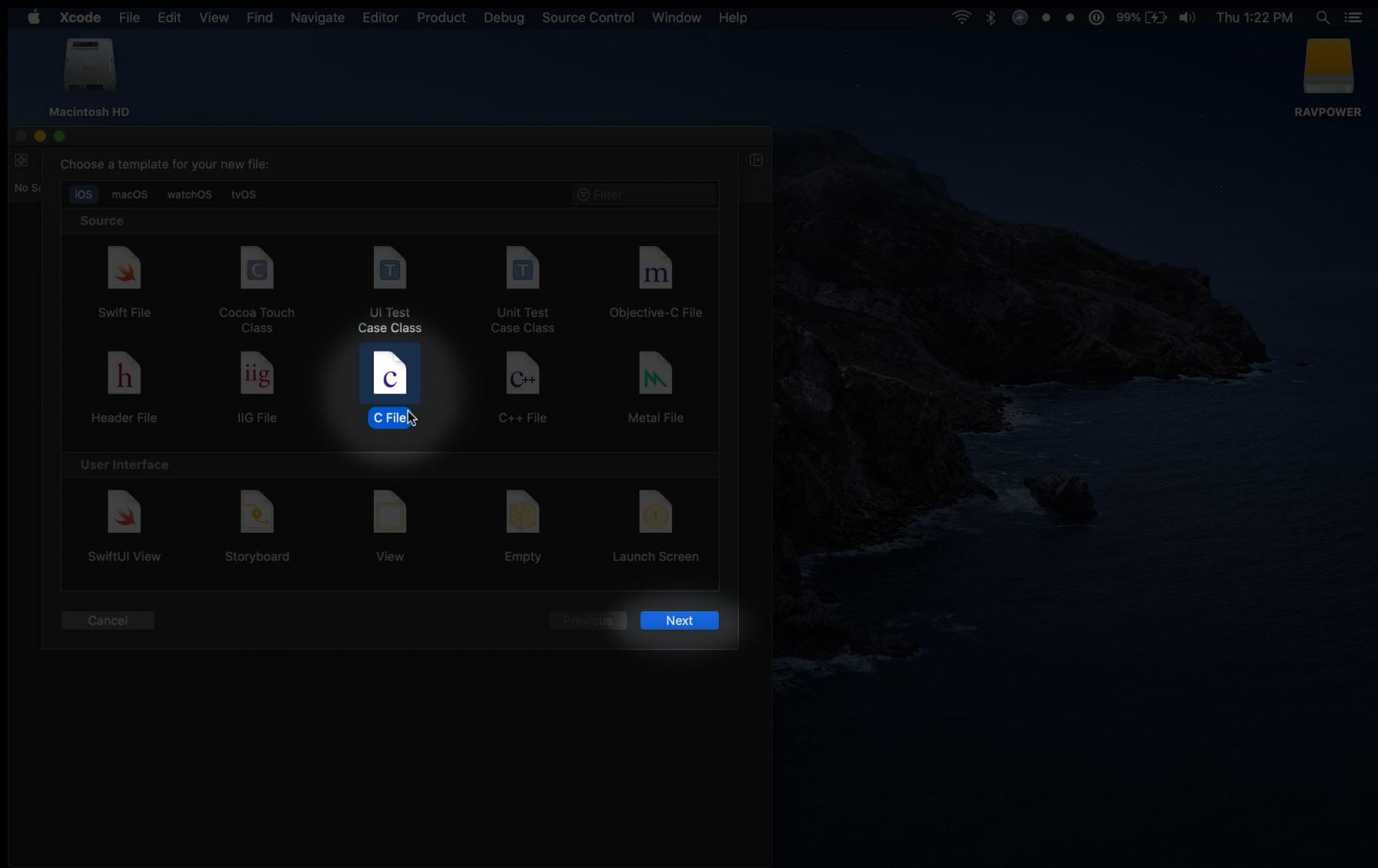
2. Install additional required components



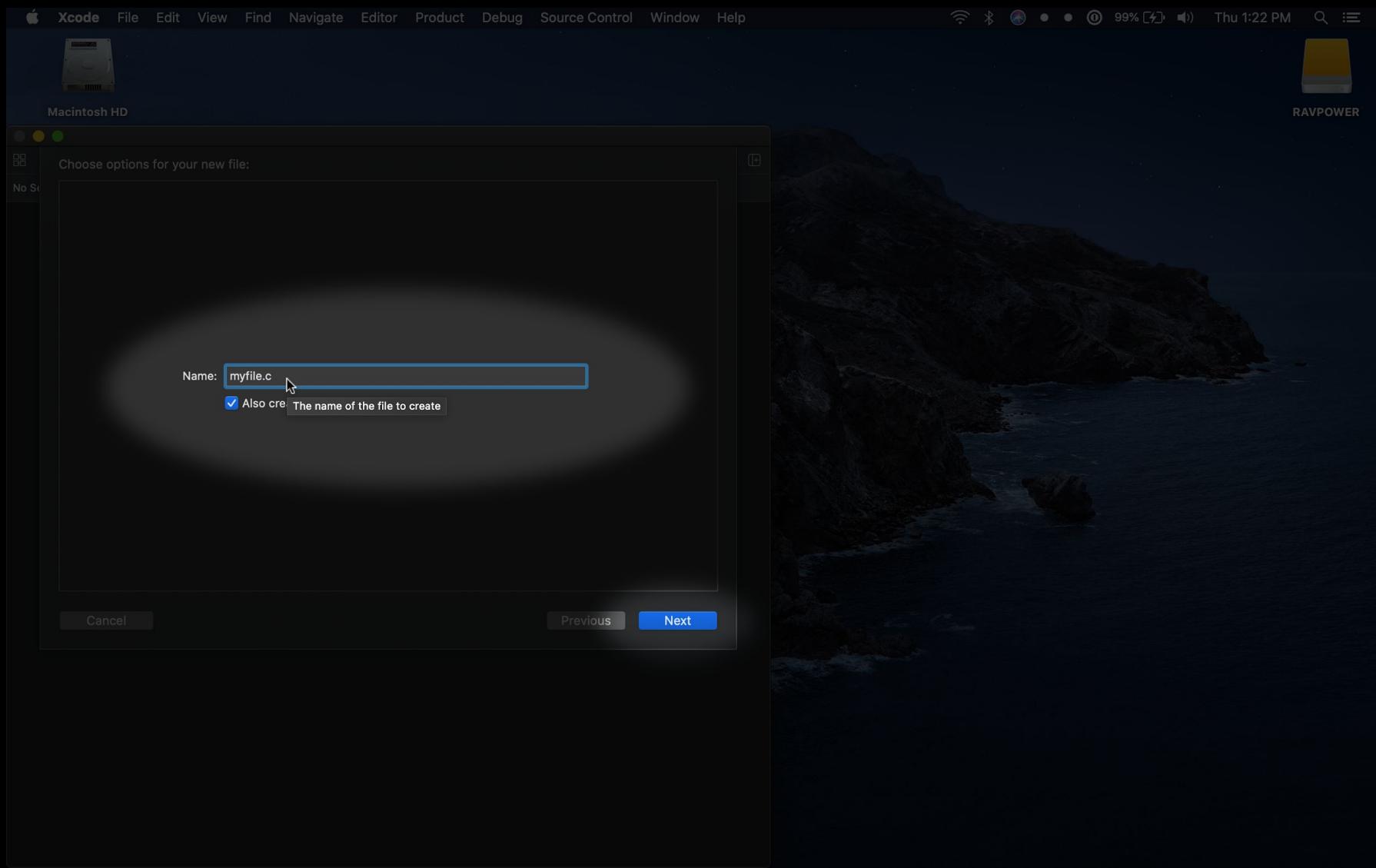
3. Click [File] > [New] > [File...]



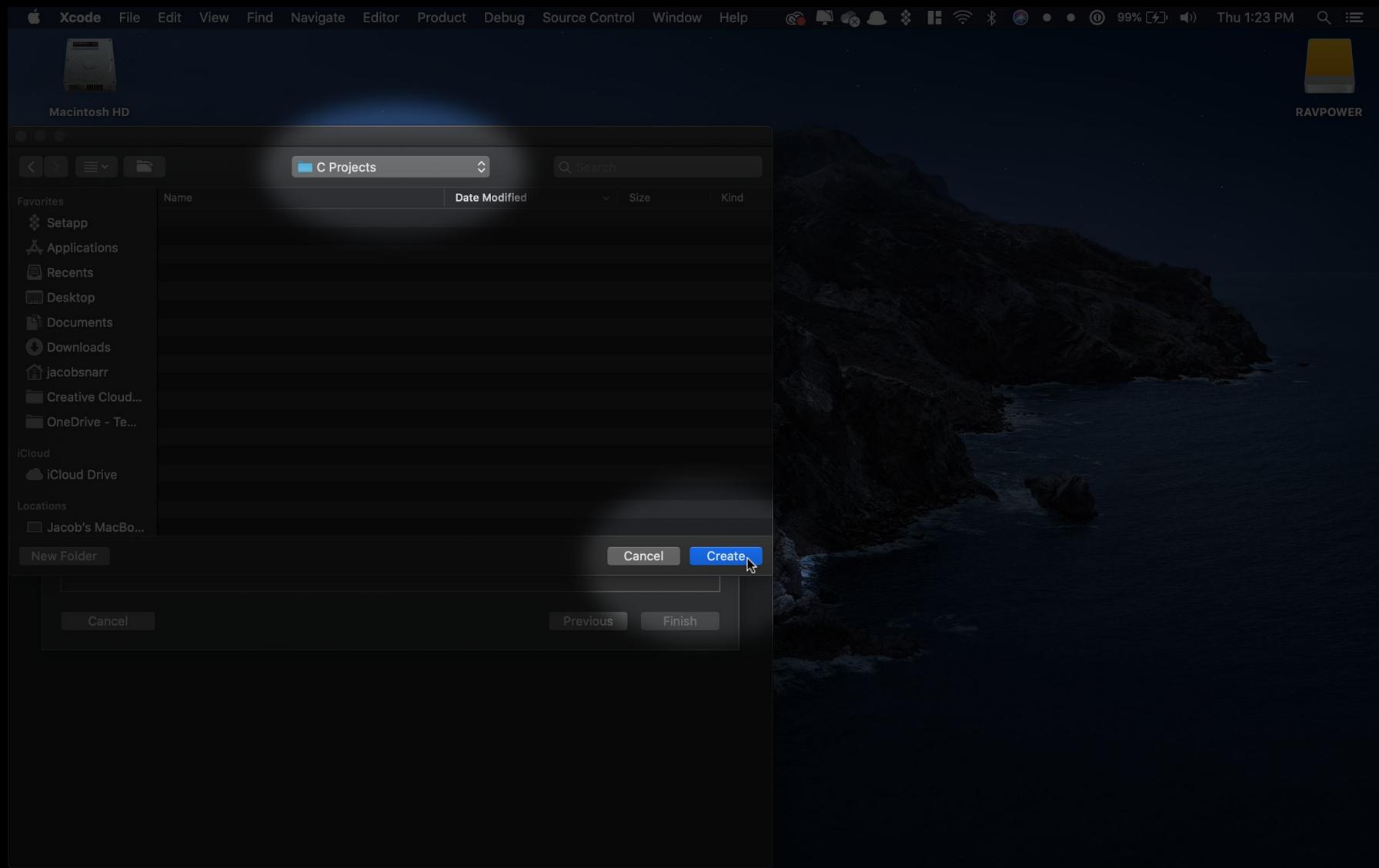
4. Select “C File” and click [Next]



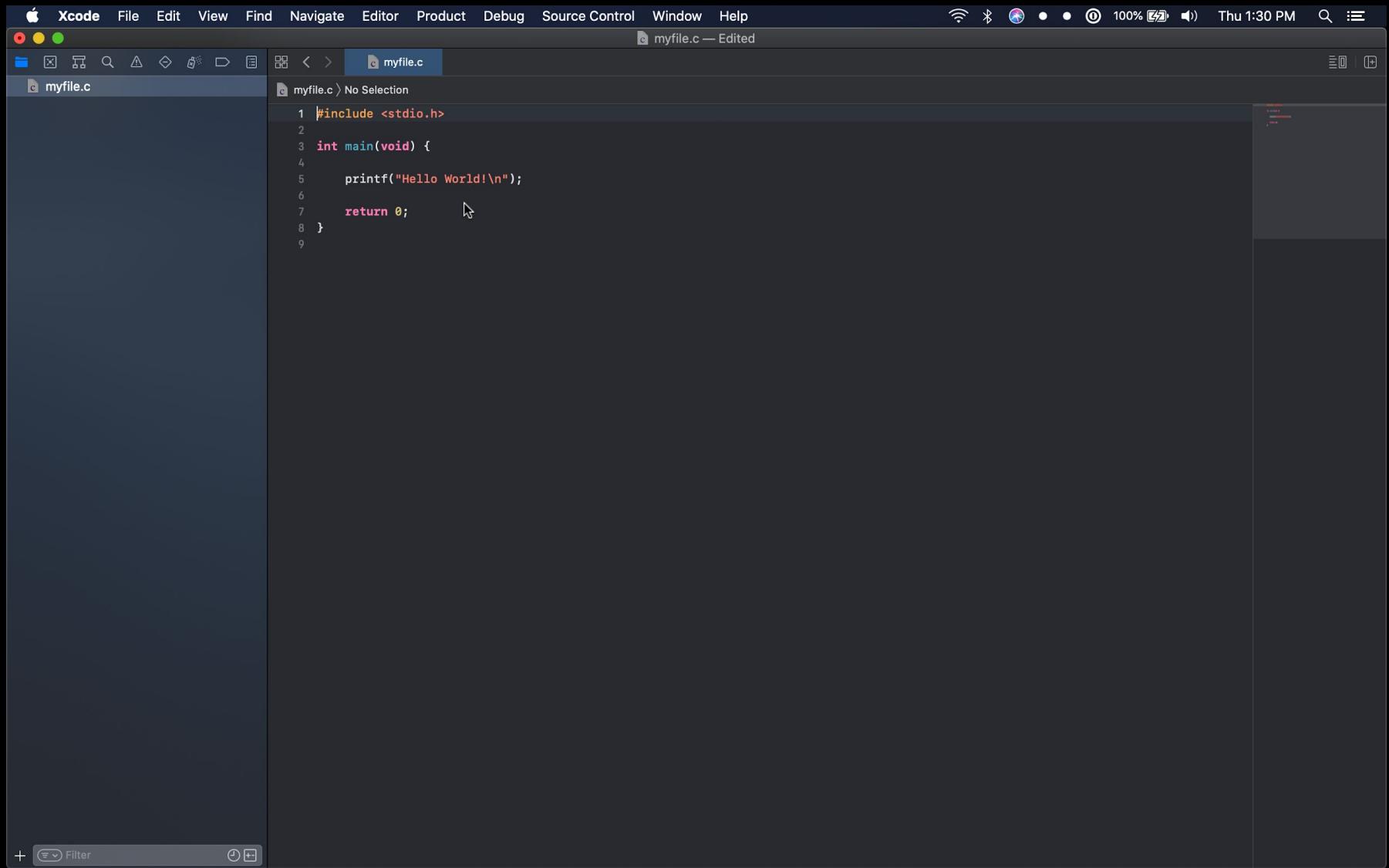
5. Name your file (with the “.c” extension)



6. Choose where you want to save the file



7. You can edit your code here



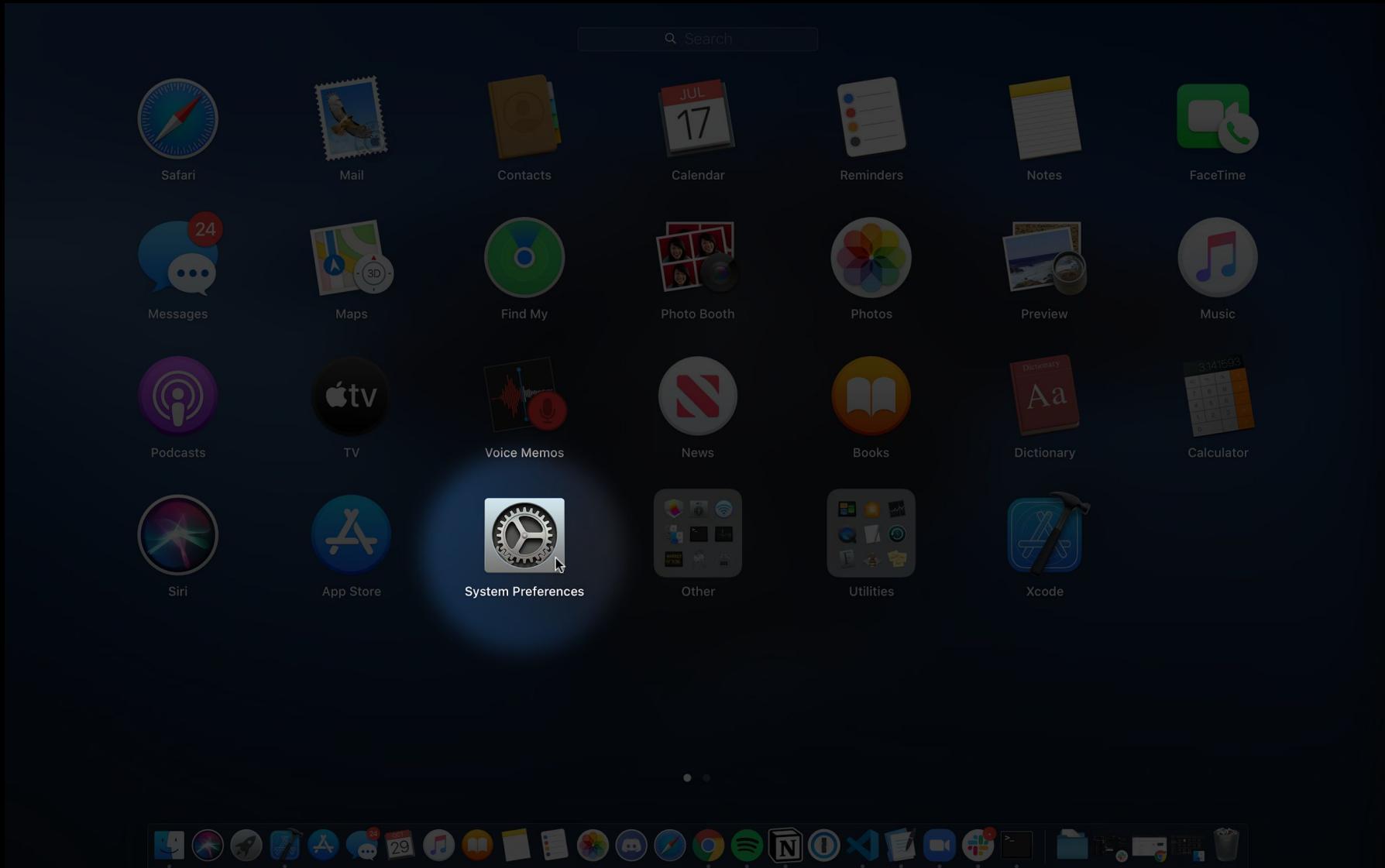
The screenshot shows the Xcode IDE interface on a Mac. The menu bar includes Apple, Xcode, File, Edit, View, Find, Navigate, Editor, Product, Debug, Source Control, Window, and Help. The status bar at the top right shows connectivity icons, battery level (100%), and the date and time (Thu 1:30 PM). The main window title is "myfile.c — Edited". The left sidebar shows a file tree with "myfile.c" selected. The editor pane displays the following C code:

```
1 #include <stdio.h>
2
3 int main(void) {
4     printf("Hello World!\n");
5
6     return 0;
7 }
8
9
```

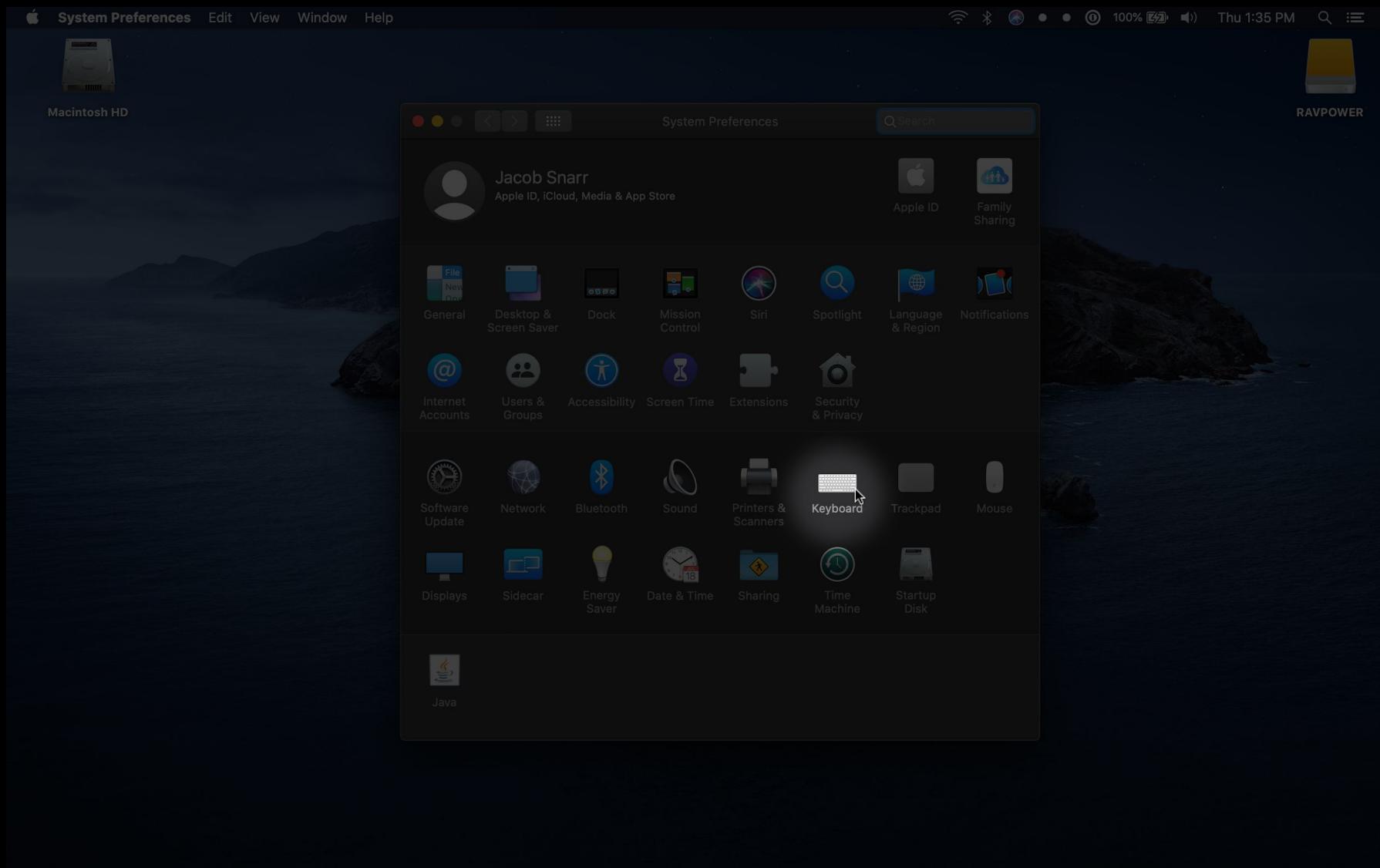
The code is a simple "Hello World!" program. The cursor is positioned at the end of the first line of code.

One Time Setup for
Easily Opening Terminal

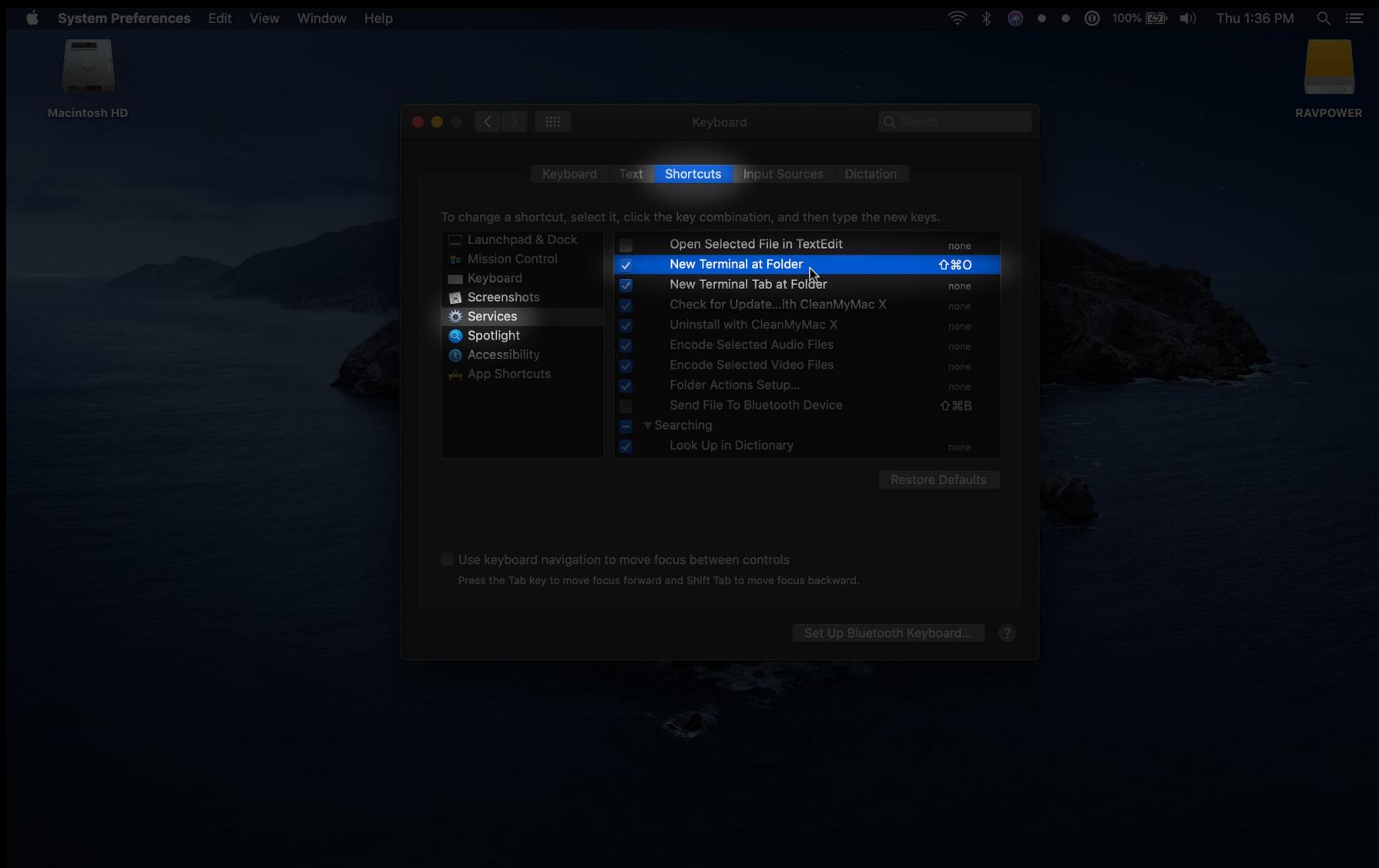
1. Open System Preferences



2. Open the Keyboard settings

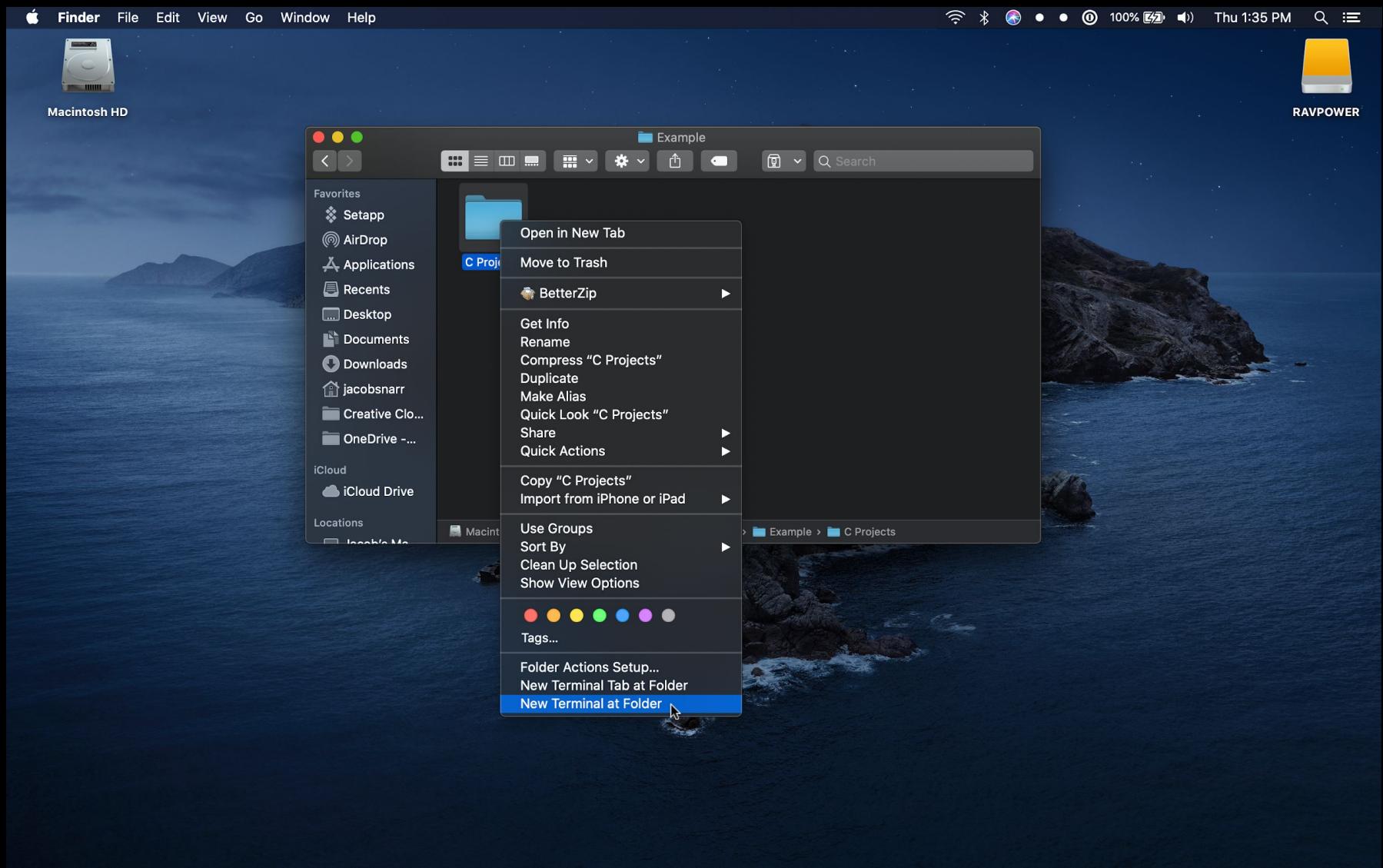


3. Shortcuts -> Services, Check “New Terminal At Folder”

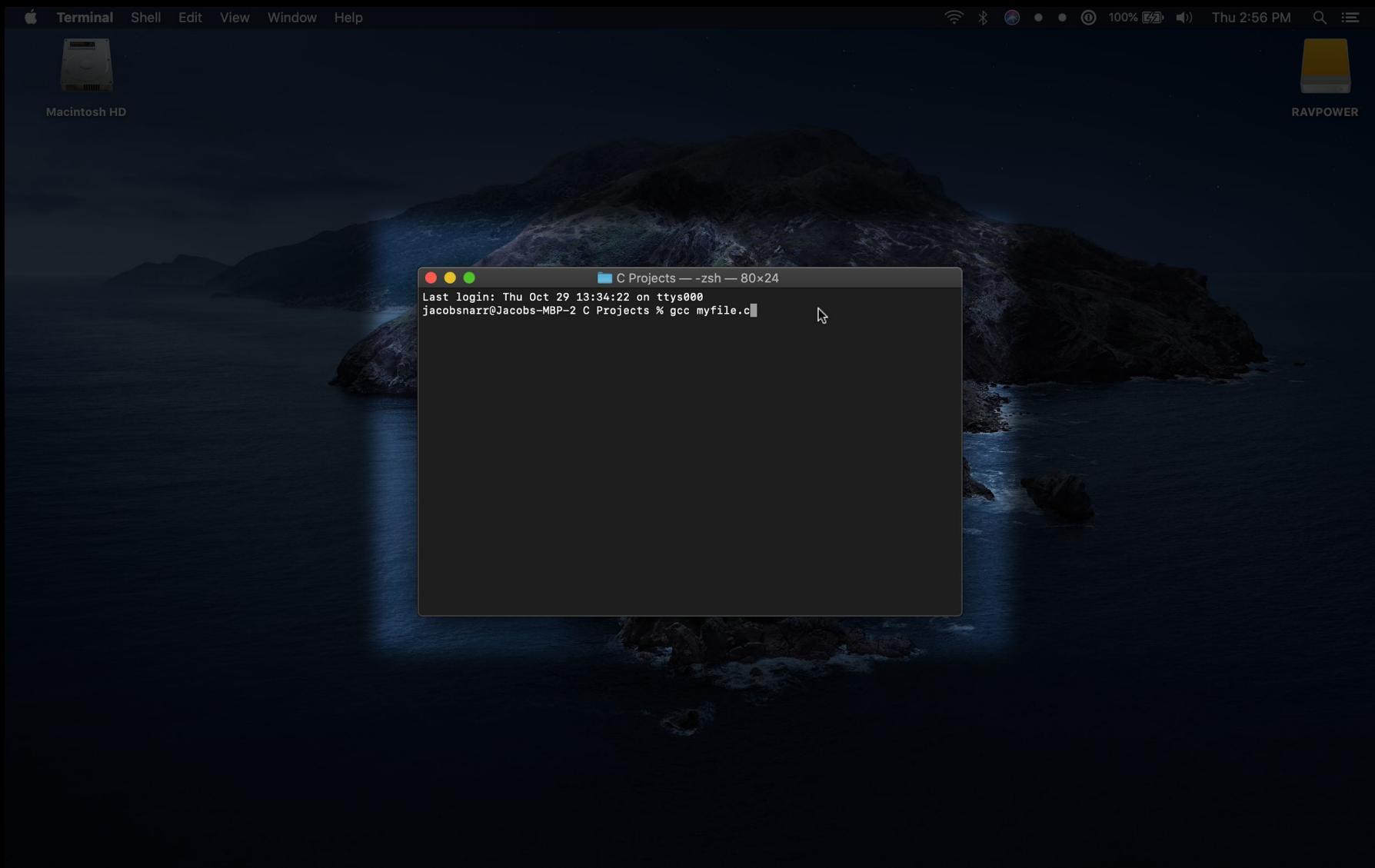


Compiling and Running Your Code in Terminal

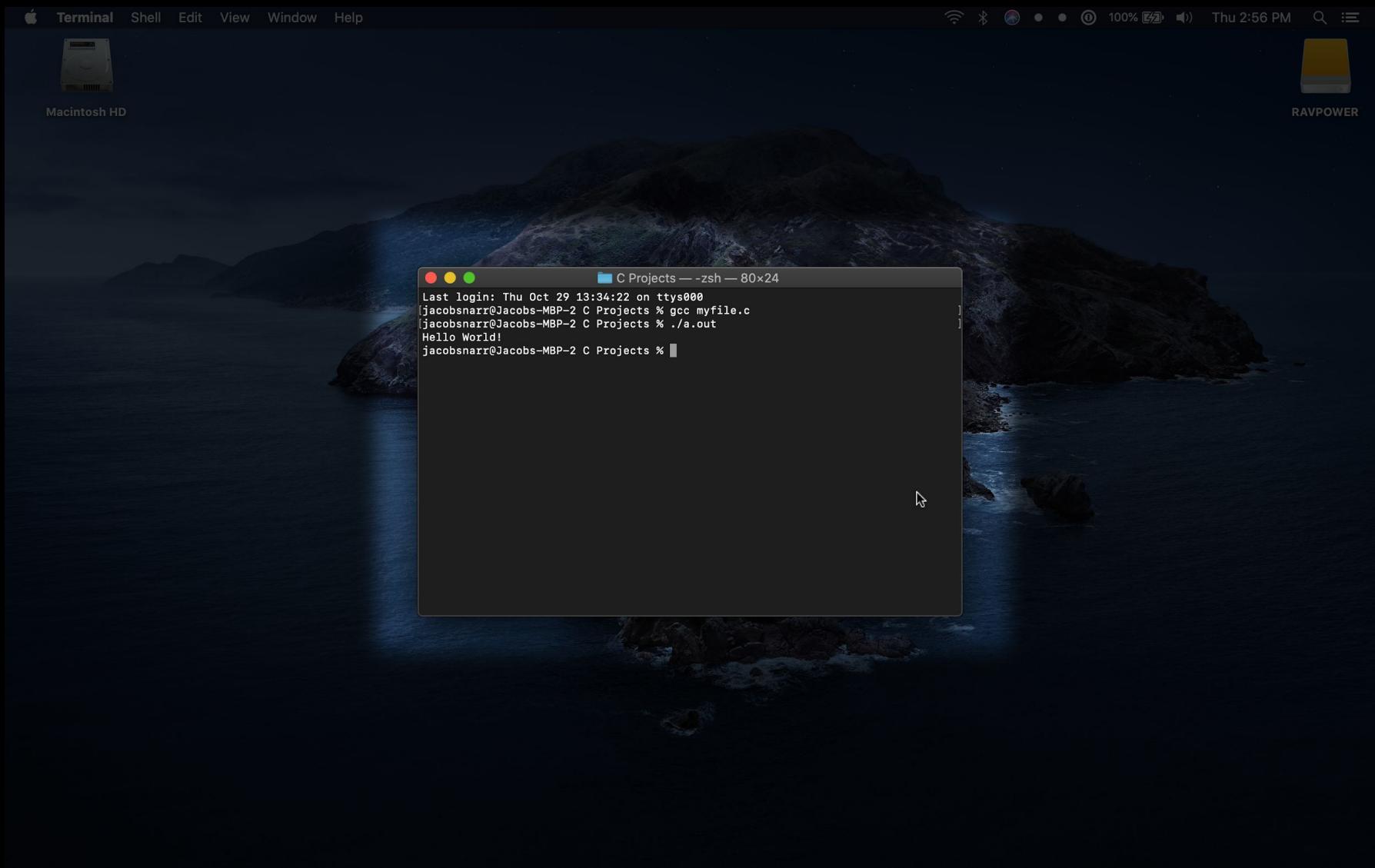
1. Right click your project folder in Finder. Select “New Terminal at Folder”



2. Run `gcc myFile.c` to compile the code

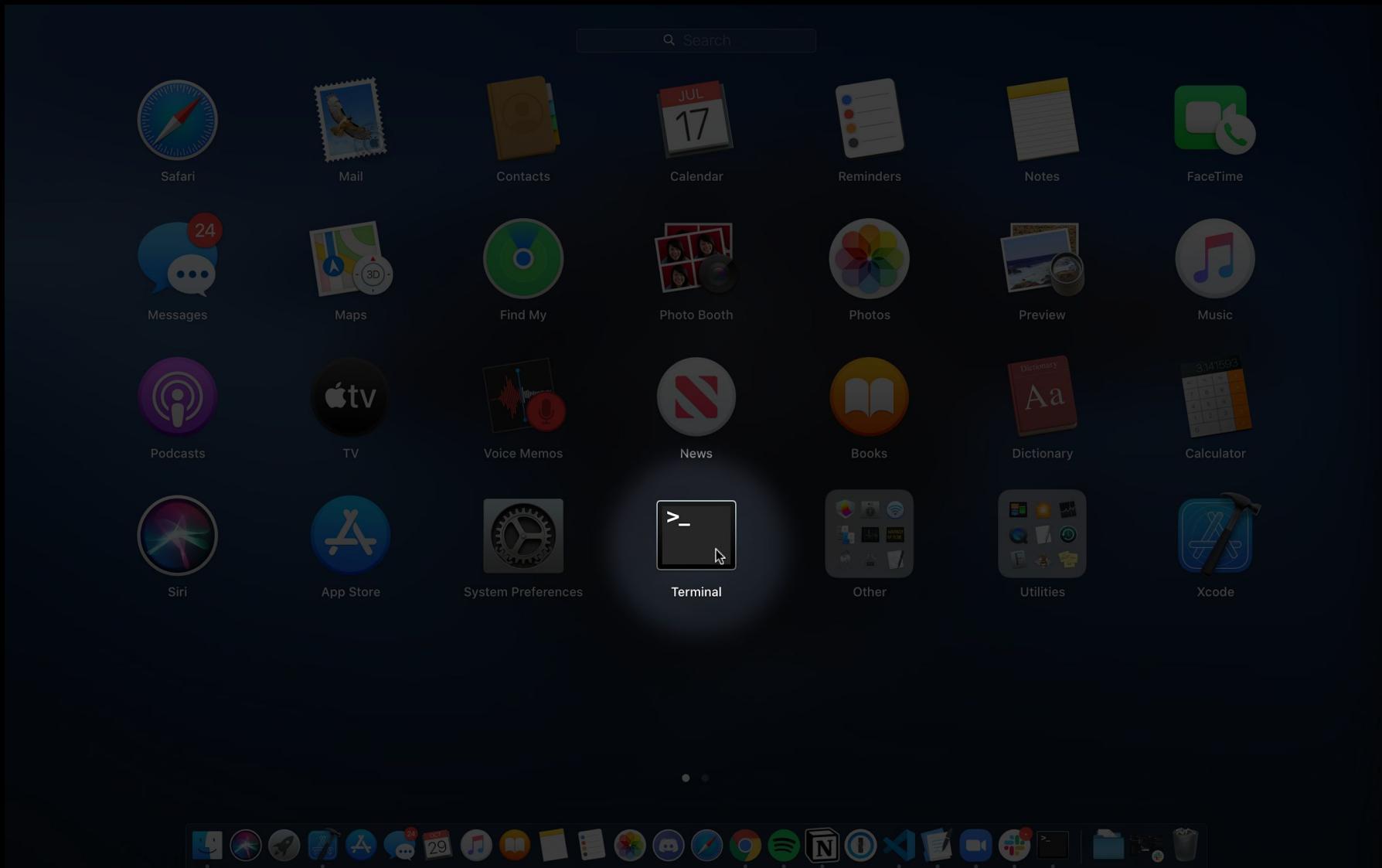


3. Run ./a.out to run the compiled file

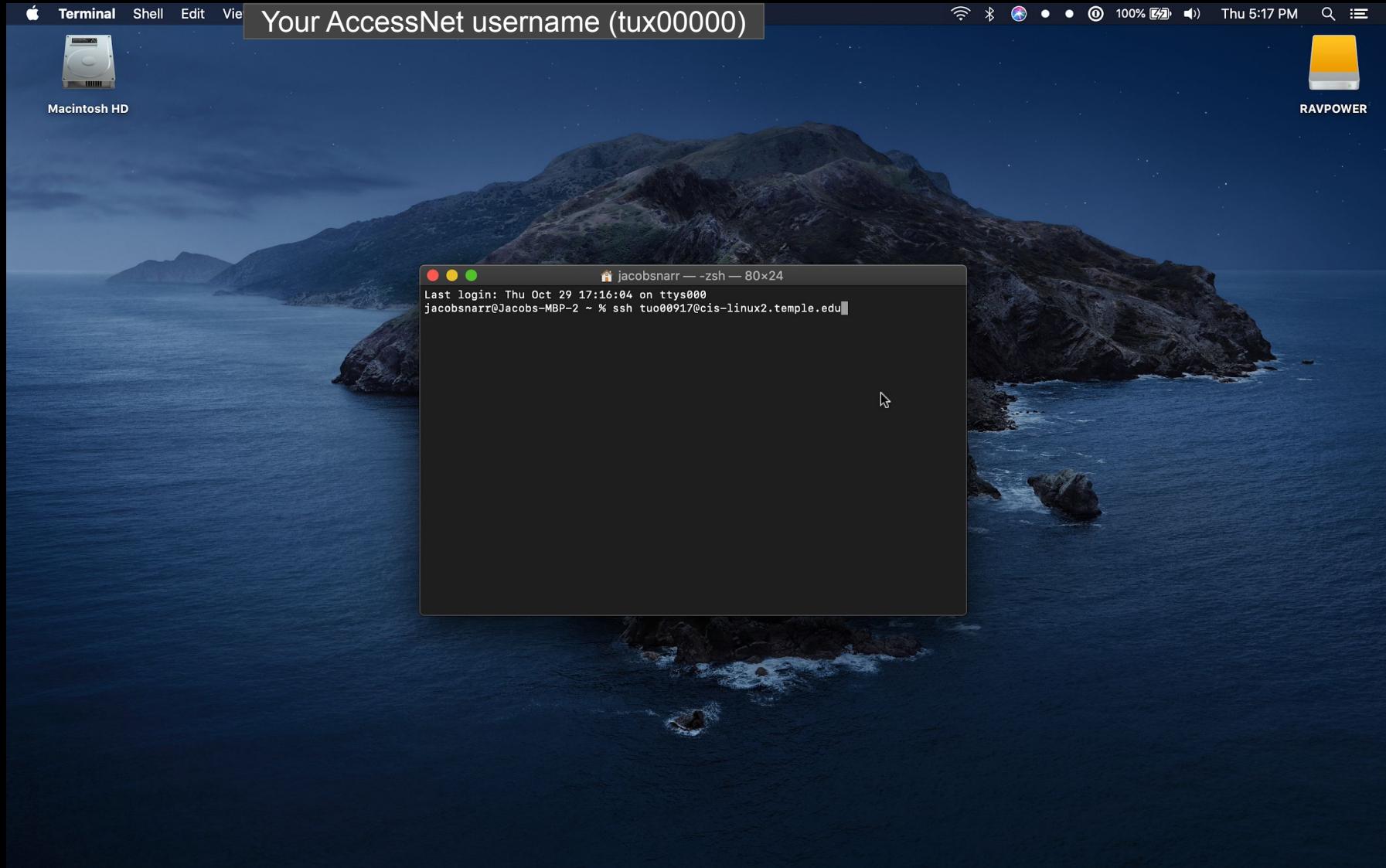


Connecting to Temple's Linux2 Server

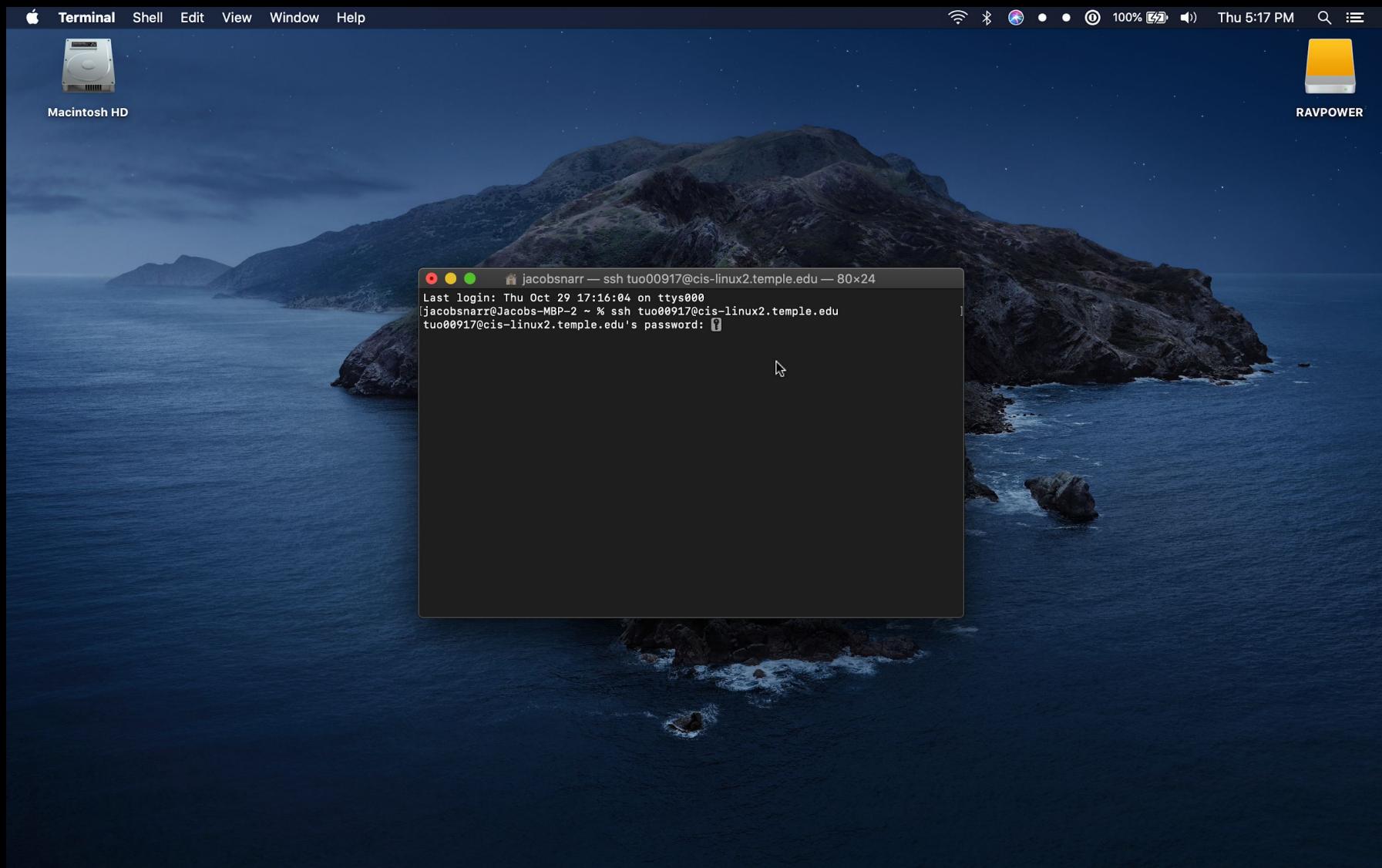
1. Open Terminal



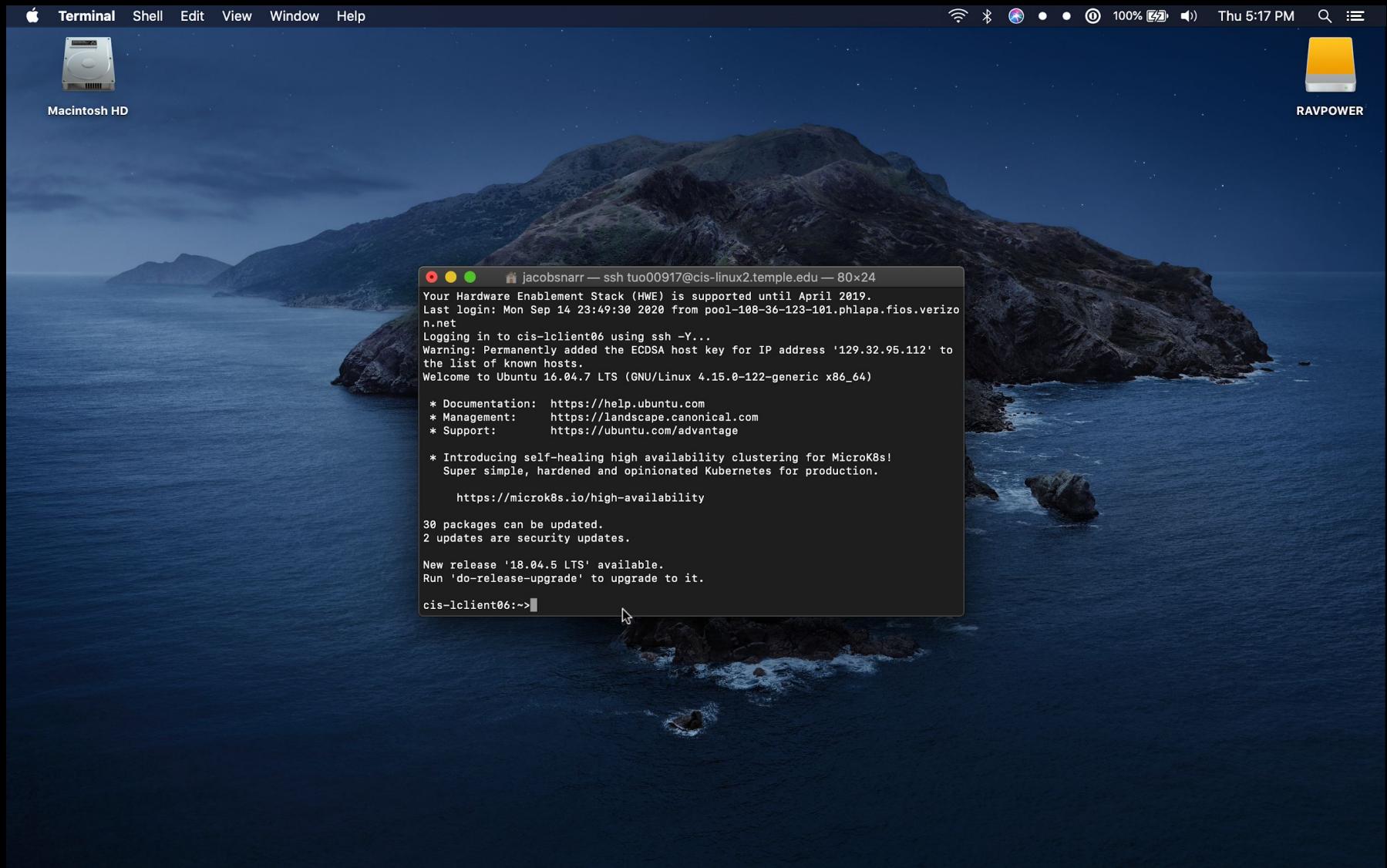
2. Run `ssh [username]@cis-linux2.temple.edu`



3. Enter your AccessNet password in the hidden field



4. You are now logged in to the Linux Terminal



One Time Setup for Transferring Files to Temple's Linux2 Server

1. Download and Install FileZilla ([link](#))

The screenshot shows a Mac OS X browser window displaying the official FileZilla website at filezilla-project.org. The page features the FileZilla logo and the tagline "The free FTP solution". A sidebar on the left contains links for Home, FileZilla (Features, Screenshots, Download, Documentation, FileZilla Pro), FileZilla Server (Download), Community (Forum, Project page, Wiki), General (FAQ, Support, Contact, License, Privacy Policy, Trademark Policy), Development (Source code, Nightly builds, Translations, Version history, Changelog, Issue tracker), Other projects (libfilezilla, Octochess), and Sponsors (NDC). The main content area includes a promotion for FileZilla Pro, a section for downloading the Mac OS X client (with a large green "Download FileZilla Client" button), and a screenshot of the FileZilla interface showing file transfers.

Safari File Edit View History Bookmarks Window Help

filezilla-project.org

F FileZilla The free FTP solution

Promotion:

FileZilla® Pro The Best FTP Solution GET IN NOW >

Download FileZilla Client for Mac OS X

The latest stable version of FileZilla Client is 3.51.0

Please select the file appropriate for your platform below.

Mac OS X X

Download FileZilla Client

Requires OS X 10.13.2 or newer

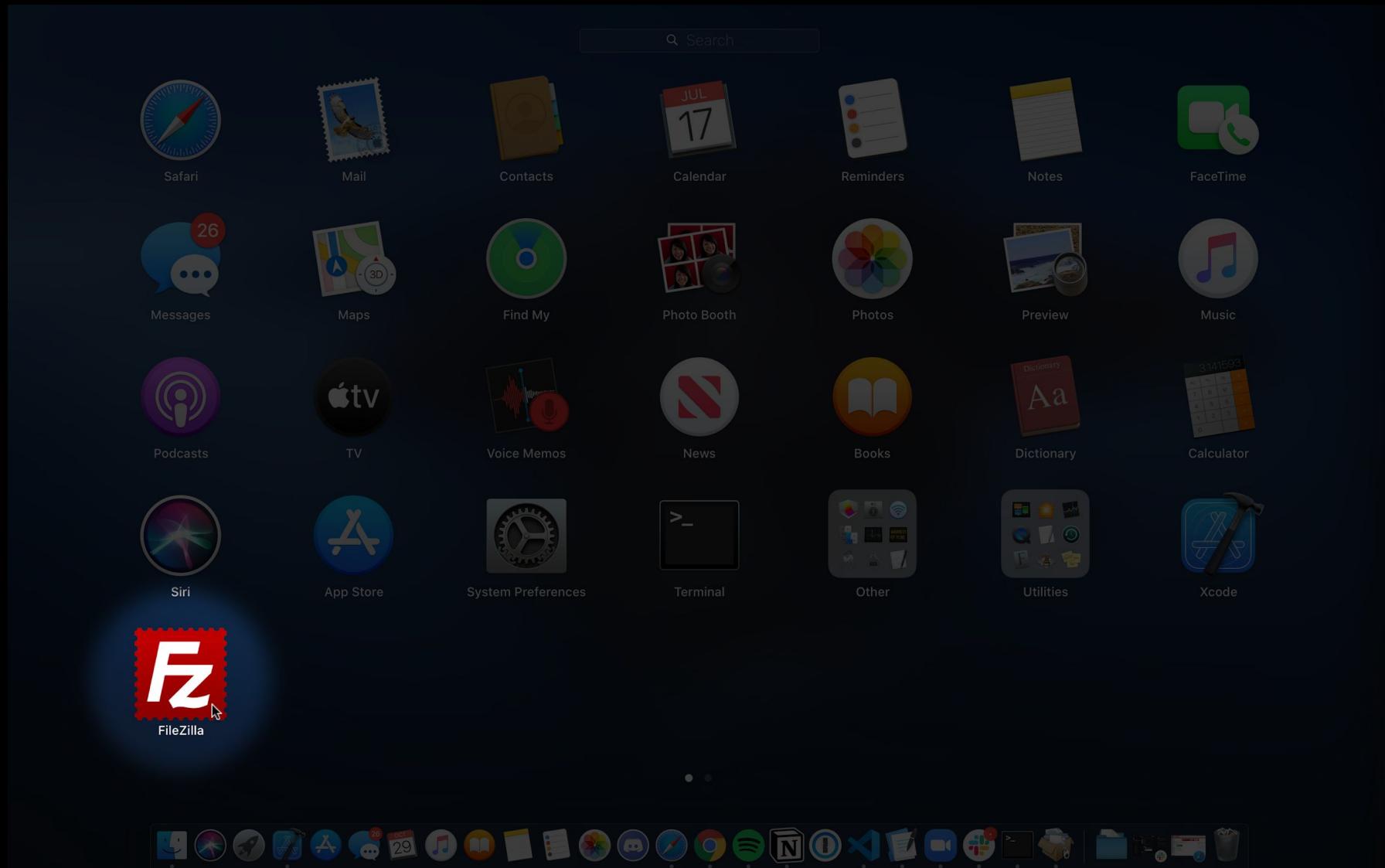
More download options

Other platforms:

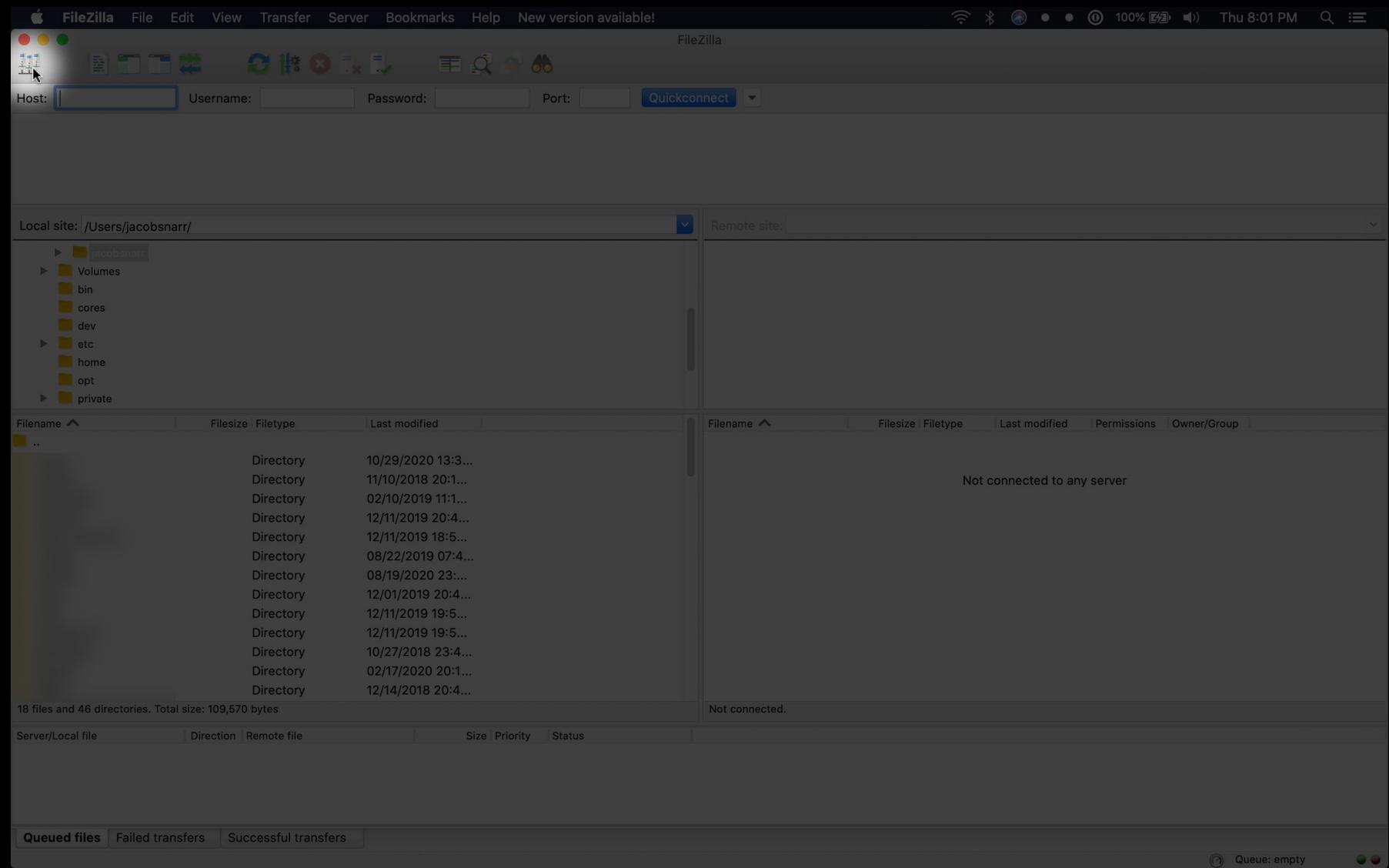
Not what you are looking for?

Advertisement:

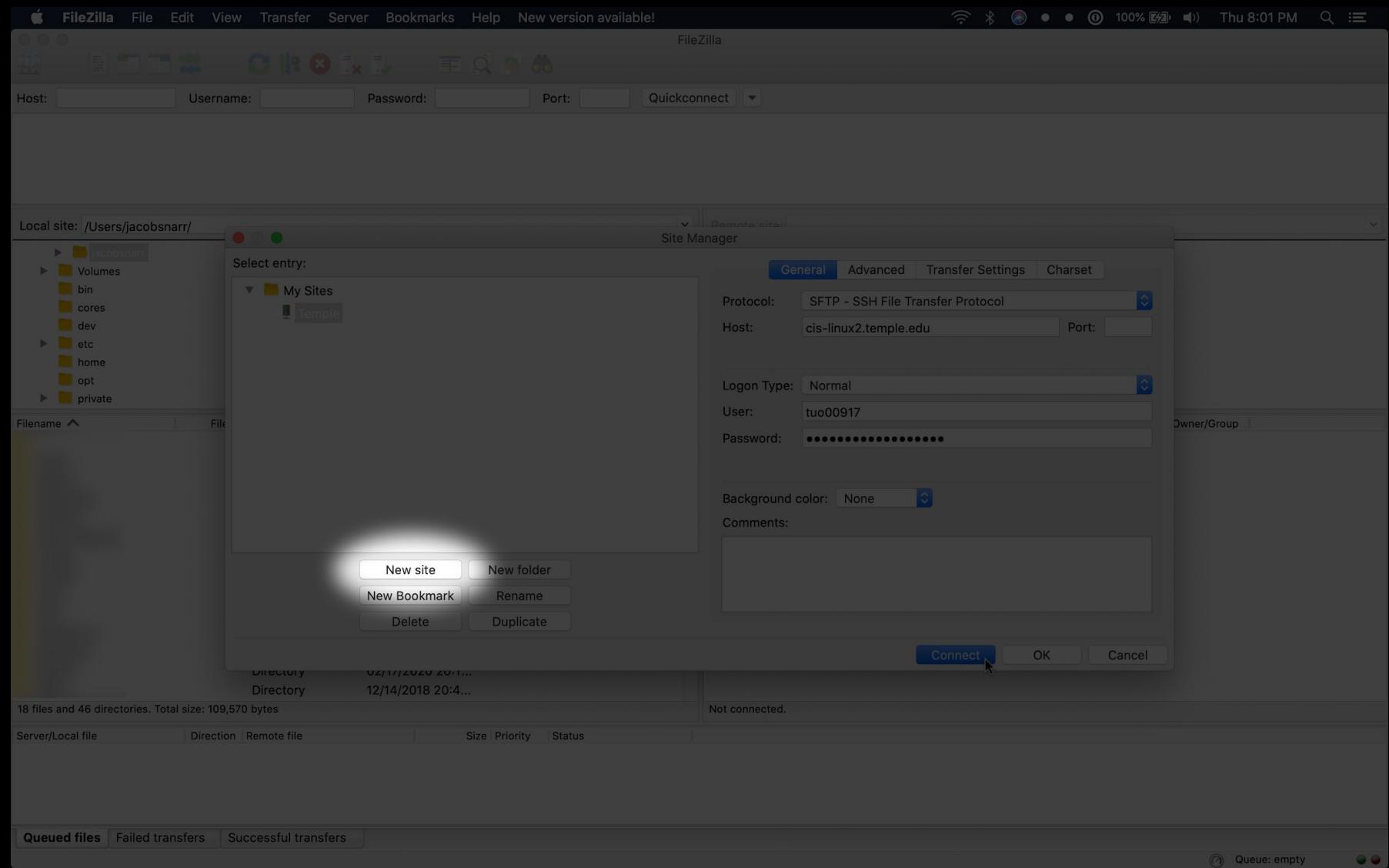
2. Open FileZilla



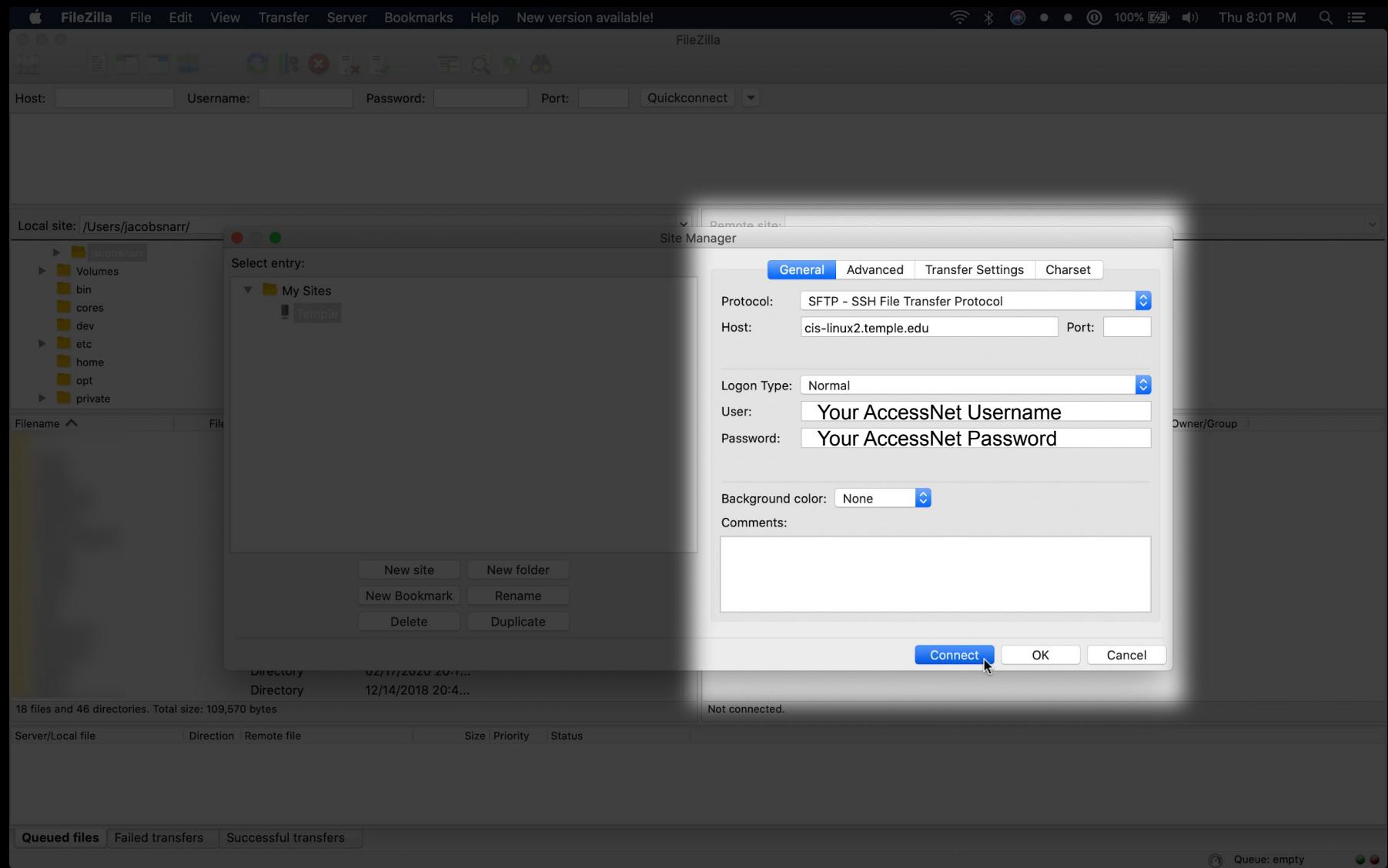
3. Select the Site Manager icon



4. Click “New Site”

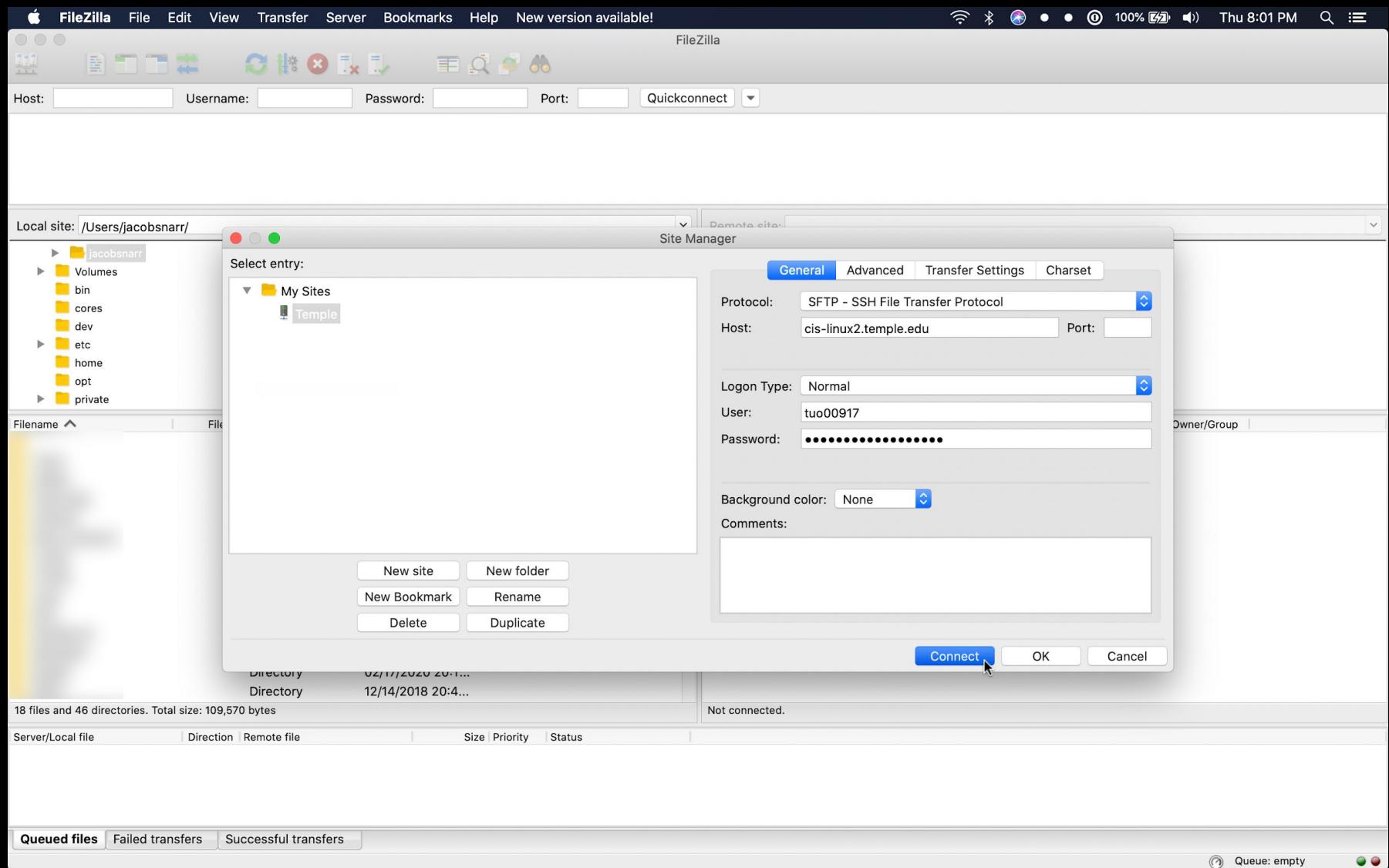


5. Select the following settings

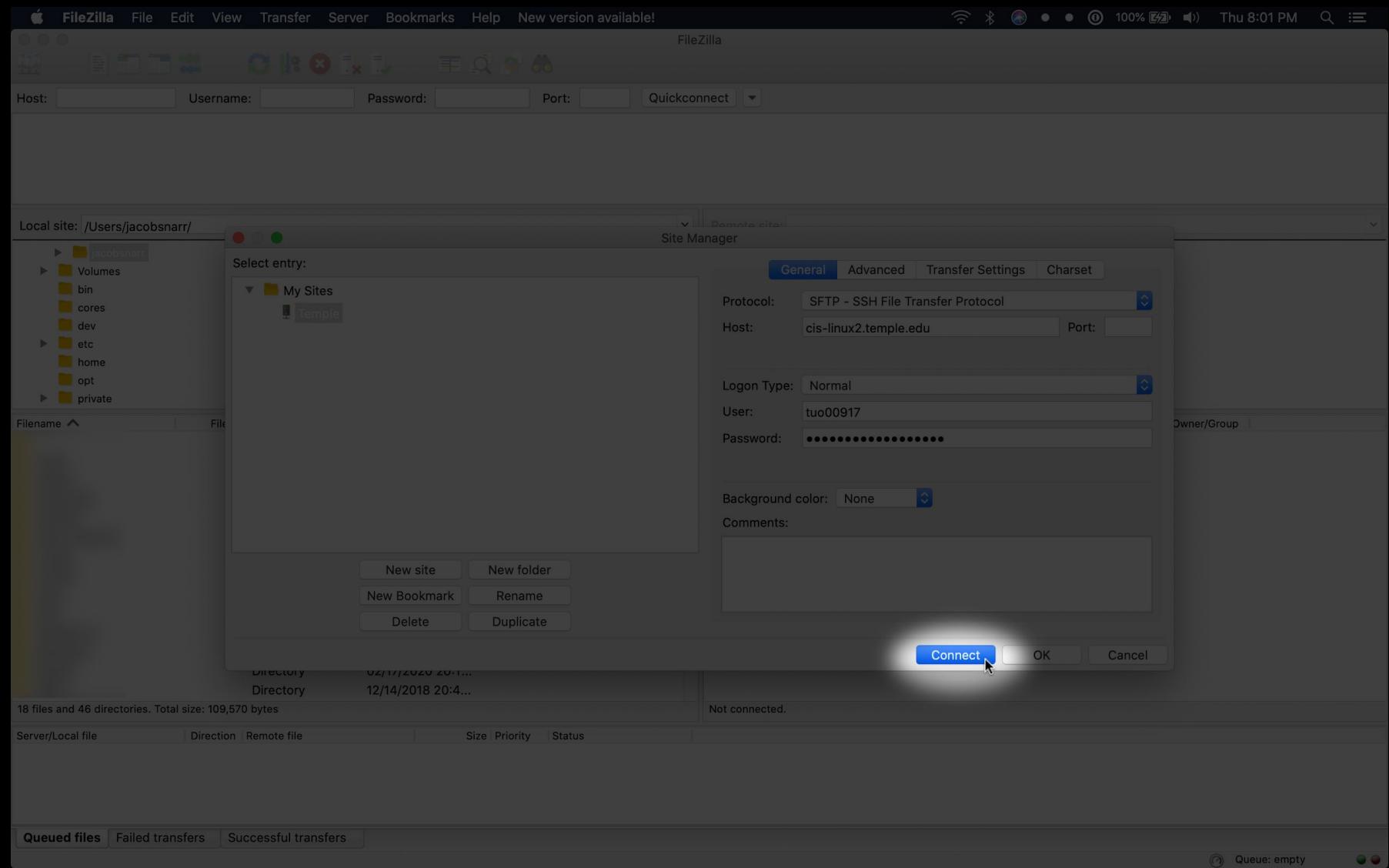


Transferring Files to Temple's Linux2 Server

1. Find your “site” in the Site Manager



2. Click Connect



3. Drag and drop files to and from the remote Linux server

The screenshot shows the FileZilla interface with two main panes. The left pane, titled "Local site: /Users/jacobsnarr/", displays a file tree with several directories like "jacobsnarr", "Volumes", "bin", "cores", "dev", "etc", "home", "opt", and "private". The right pane, titled "Remote site: /home/TU/tuo00917", shows a similar file tree structure on a Linux server, with directories "home", "TU", and "tuo00917". Below the panes are two large, bold text labels: "Local Files" on the left and "Linux Server Files" on the right, both partially obscured by the blurred file lists.

FileZilla

File Edit View Transfer Server Bookmarks Help New version available!

Temple - sftp://tuo00917@cis-linux2.temple.edu - FileZilla

Host: Username: Password: Port: Quickconnect

Status: Connecting to cis-linux2.temple.edu...
Status: Using username "tuo00917".
Status: Server refused our key
Status: Connected to cis-linux2.temple.edu
Status: Retrieving directory listing...
Status: Listing directory /home/TU/tuo00917
Status: Directory listing of "/home/TU/tuo00917" successful

Local site: /Users/jacobsnarr/

jacobsnarr

Volumes

bin

cores

dev

etc

home

opt

private

Filename Filesize Filetype Last modified

..

Selected 1 directory.

Queued files Failed transfers Successful transfers

Remote site: /home/TU/tuo00917

/

home

TU

tuo00917

Filename Filesize Filetype Last modified Permissions Owner/Group

..

9 files and 2 directories. Total size: 32,117 bytes

Server/Local file Direction Remote file Size Priority Status

Locked Queue: empty