**Installing “Rescue” version of Maxima for MacOS Sonoma (for Silicon Macs only)**(January 2024)

*(This does also seem to work for Sonoma Macs with* ***Intel*** *Chips – Intel commands are given at the end of the document\*\*\*)*

**PLEASE NOTE THAT YOU DO THIS AT YOUR OWN RISK. It’s a fairly safe procedure, but if you haven’t used commands in the Terminal before, take care, and if possible you might like to get help from someone else who has a bit more experience.**

**IMPORTANT: all commands in *italics* are run in the Terminal.app (Applications/Utilities/Terminal.app). DO Copy and Paste the commands into the Terminal – DON”T try to type the commands yourself! DON’T include the % sign: it’s already there in the Terminal.**

**Quickstart:**

1. Install Xcode tools: *xcode-select --install*

2. Install Homebrew:

*/bin/bash -c "$(curl -fsSL* [*https://raw.githubusercontent.com/Homebrew/install/HEAD/install.sh*](https://raw.githubusercontent.com/Homebrew/install/HEAD/install.sh)*)"*

*eval "$(/opt/homebrew/bin/brew shellenv)"*

3, Install maxima: *brew install maxima*

4, Install wxmaxima: *brew install wxmaxima*

5. If necessary link wxmaxima to maxima with path */opt/homebrew/bin/maxima*

6. If necessary, enable graph plotting with:

*gnuplot command:"/opt/homebrew/bin/gnuplot"$*

*draw\_command:"/opt/homebrew/bin/gnuplot"$*

***Detailed instructions:***

**1. Installing HomeBrew on MacOS Sonoma Beta**

Before you can install Homebrew in MacOS Sonoma, you need to install the Command Line Tools.

1. Launch the Terminal application (/Applications/Utilities/Terminal.app)
2. Run the following command, this should install Command Line Tools (or you may get a message to download the software – this can take a few minutes, depending on your internet speed)   
     
   *%**xcode-select --install*
3. After Command Line Tools has installed, install **HomeBrew** by entering the following command **exactly** (**copy and paste** as emphasised above):
4. *% /bin/bash -c "$(curl -fsSL* [*https://raw.githubusercontent.com/Homebrew/install/HEAD/install.sh*](https://raw.githubusercontent.com/Homebrew/install/HEAD/install.sh)*)"*
5. *and hit Enter.*
6. Run this command in your terminal to add Homebrew to your **PATH**:  
      
   *% eval "$(/opt/homebrew/bin/brew shellenv)"*

That’s it, you’ve installed Homebrew on a Sonoma Mac. If you type: % *brew help* you should see a list of Brew instructions, which shows that you’ve been successful so far!

**2. Install Maxima:**

*% brew install maxima*

**3. Install wxmaxima:**

*% brew install wxmaxima*

**4.** Finally(!), in the Finder menu, Go -> Go to Folder. Type or copy: /opt/homebrew/bin/ and scroll down (a long way!) to wxmaxima and double-click. That should be it, and wxmaxima should open!

**5.** In due course, you should make an alias (shortcut) of the wxmaxima file somewhere more convenient (ctrl-click on wxmaxima, choose “Make alias” and drag the alias to the Desktop).

6. In wxmaxima Settings select “Worksheet” right at the top. scroll down and select:

“Enter evaluates cells, Ctrl+Enter adds newlines” *(See the Computer Algebra Guide p13)*



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You may get a message that Maxima can’t be found. If so (also see below)

* 1. Go to wxMaxima Settings, select Maxima, in the drop-down menu at the top of the main window.
  2. Just below “Maxima program” switch to “User Specified”, delete what’s there (if anything) and:

copy and paste: */opt/homebrew/bin/maxima*

* 1. Restart wxmaxima.

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Close the settings window, quite and relaunch wxmaxima and test: in the main window **type 2+2 then hit “Enter”**and you should get (unsurprisingly but reassuringly) 4 (!).

Then test the graph plotting by typing **wxplot2d(x^2,[x,0,1]) and “Enter”**. You should then get a nice quadratic curve (note that the *outer* brackets are the usual curved ones, but the *inner* ones are square.

NB: I didn’t need to do this, but if you can’t get graph plotting to work, then there is advice to enable gnuplot functionality by going to wxMaxima settings again, select “Startup Items” from the top menu, then copy and paste into the bottom window:

*gnuplot\_**command:"/opt/homebrew/bin/gnuplot"$*

*draw\_command:"/opt/homebrew/bin/gnuplot"$*

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*Then quit and relaunch wxmaxima, or choose “Restart Maxima” from the Maxima menu.*

*Good luck and take care!*

*Mike Hay, MST124 Tutor*

*(Updated 2 Jan 2024)*

**Troubleshooting:**

1. When reloading a previously saved .wxm or .wxmx file, DON’T double-click the file. Use File->Open in the wxMaxima menu. Otherwise graphs may not plot.
2. To avoid accidentaly over-writing scripts, you may want to switch off “Save worksheet automatically” In Settings.. (Set the top to “Options”)
3. If you need to use “plot2d” rather than “wxplot2d” then use Terrninal.app to install Aquaterm with

% *brew install aquaterm*

**\*\*\*Quickstart for Intel chips (basically, replace /opt/ with /usr/local*/* in all commands):**

1. Install Xcode tools: *xcode-select --install*

2. Install Homebrew:

*/bin/bash -c "$(curl -fsSL* [*https://raw.githubusercontent.com/Homebrew/install/HEAD/install.sh*](https://raw.githubusercontent.com/Homebrew/install/HEAD/install.sh)*)"*

*eval "$(/usr/local/homebrew/bin/brew shellenv)"*

3, Install maxima: *brew install maxima*

4, Install wxmaxima: *brew install wxmaxima*

If necessary link wxmaxima to maxima with path */usr/local/homebrew/bin/maxima*