

**Step 1:** navigate into the book code's main repository

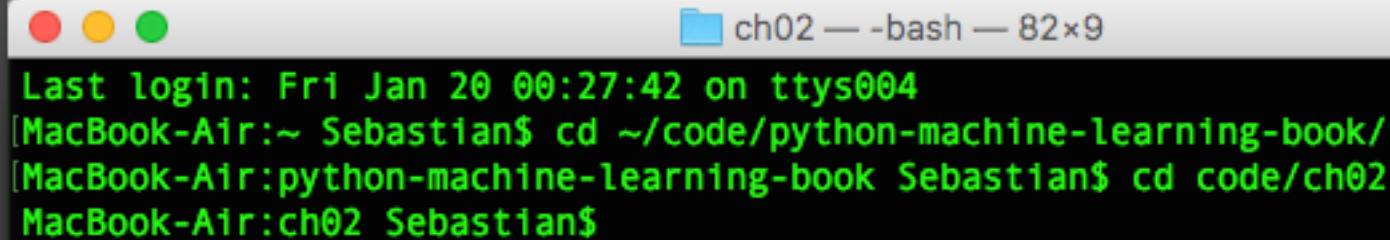
A screenshot of a macOS terminal window. The title bar at the top shows three colored window control buttons (red, yellow, green) on the left, a home icon followed by the text 'Sebastian — -bash — 82x9' in the center, and a close button on the right. The terminal area has a black background with green text. The first line of text is 'Last login: Fri Jan 20 00:27:42 on ttys004'. The second line is a command prompt '[MacBook-Air:~ Sebastian\$ cd ~/code/python-machine-learning-book/' followed by a green cursor block. The rest of the terminal area is empty.

```
Sebastian — -bash — 82x9
```

```
Last login: Fri Jan 20 00:27:42 on ttys004
```

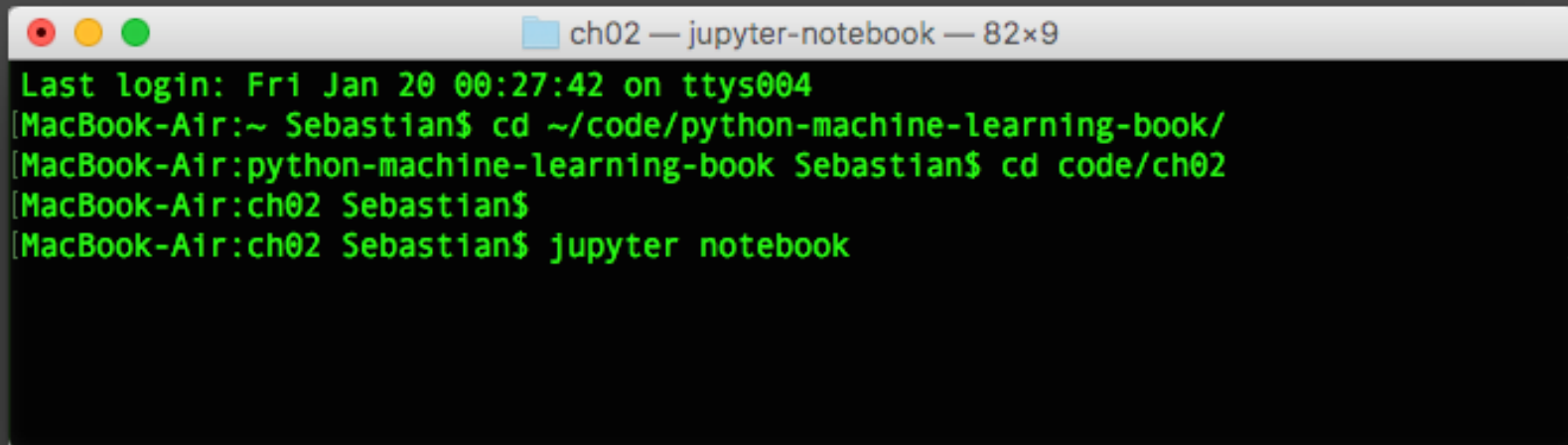
```
[MacBook-Air:~ Sebastian$ cd ~/code/python-machine-learning-book/
```

**Step 2:** assuming we want to run the code for chapter 2, navigate into the subdirectory “code/ch02”

A screenshot of a macOS terminal window. The title bar shows a folder icon, the text 'ch02', and '-bash' followed by the window size '82x9'. The terminal text is green on a black background. It shows a login message, followed by two 'cd' commands that navigate from the home directory to the 'code/ch02' subdirectory.

```
ch02 — -bash — 82x9
Last login: Fri Jan 20 00:27:42 on ttys004
[MacBook-Air:~ Sebastian$ cd ~/code/python-machine-learning-book/
[MacBook-Air:python-machine-learning-book Sebastian$ cd code/ch02
MacBook-Air:ch02 Sebastian$
```

## Step 3: run the “jupyter notebook” command



```
ch02 — jupyter-notebook — 82x9
Last login: Fri Jan 20 00:27:42 on ttys004
[MacBook-Air:~ Sebastian$ cd ~/code/python-machine-learning-book/
[MacBook-Air:python-machine-learning-book Sebastian$ cd code/ch02
[MacBook-Air:ch02 Sebastian$
[MacBook-Air:ch02 Sebastian$ jupyter notebook
```

**Step 4:** step 3 should have opened a new window in your default browser, looking similar to the following



simply click on “ch02.ipynb” and the Jupyter notebook should open automatically in a new tab

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if you don't see a new window appear in your browser, you can go back to the command line and copy & paste the "localhost ..." address manually into the browser

for example

```
[I 08:54:28.529 NotebookApp] The port 8888 is already in use, trying another port.
[I 08:54:28.908 NotebookApp] [nb_anacondacloud] enabled
[I 08:54:28.927 NotebookApp] [nb_conda] enabled
[I 08:54:29.190 NotebookApp] ✓ nbpresent HTML export ENABLED
[W 08:54:29.191 NotebookApp] ✗ nbpresent PDF export DISABLED: No module named 'nbbrowserpdf'
[I 08:54:29.215 NotebookApp] Serving notebooks from local directory: /Volumes/Transcend/code/python-machine-learning-book/code/ch02
[I 08:54:29.215 NotebookApp] 0 active kernels
[I 08:54:29.215 NotebookApp] The Jupyter Notebook is running at: http://localhost:8889/?token=574f72455361fa985b63d1153905df9a20674207d3ad148c
[I 08:54:29.215 NotebookApp] Use Control-C to stop this server and shut down all kernels (twice to skip confirmation)
.
[C 08:54:29.224 NotebookApp]

Copy/paste this URL into your browser when you connect for the first time,
to login with a token:
http://localhost:8889/?token=574f72455361fa985b63d1153905df9a20674207d3ad148c
[I 08:54:30.208 NotebookApp] Accepting one-time-token-authenticated connection from ::1
[I 08:55:16.545 NotebookApp] Kernel started: 16f5aa07-40a6-41c8-906d-41c1f9ccebac
^[[I 09:08:13.878 NotebookApp] 302 GET /?token=574f72455361fa985b63d1153905df9a20674207d3ad148c (::1) 0.79ms
```

you can select the cells now and click on “Cell -> Run Cells” to execute code cells

you can skip the first cell, “watermark...” but the remaining cells require to be executed sequentially (as if they were concatenated into a giant python .py script file)

jupyter ch02 Last Checkpoint: 12/30/2016 (autosaved) Logout

File Edit View Insert Cell Kernel Widgets Help Python [default]

Run Cells  
Run Cells and Select Below  
Run Cells and Insert Below  
Run All  
Run All Above  
Run All Below

Cell Type  
Current Outputs  
All Output

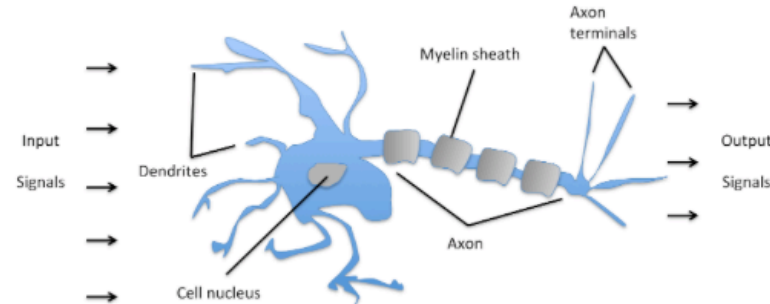
```
In [2]: from IPython.
```

### Artificial machine

glimpse into the early history of

```
In [3]: Image(filename='./images/02_01.png', width=500)
```

Out[3]:



Input Signals → Dendrites → Cell nucleus → Myelin sheath → Axon → Axon terminals → Output Signals

```
In [4]: Image(filename='./images/02_02.png', width=500)
```

**Optional:** If you can't get the notebooks to run, or if you prefer traditional .py scripts, I created a subdirectory within the code repository

