

Appendix A

Some computer basics

To be able to make good use of this book, you need to be able to perform some simple operations on a computer. (You do *not* need to know how to program a computer!) Mainly these involve viewing and printing PDF files, as well as creating, deleting, editing, saving and printing ordinary text files.

If you are using this book as part of a course, someone has set up a site somewhere on the web that contains a number of useful files. This is the book website. *You need to find out where it is!*

A.1 Working with computer files

Here is a checklist of operations you should be able to do comfortably before you start on the book:

1. View these instructions on a computer screen: Go to the book website. There is a file there called `basics.pdf` that contains this appendix in PDF format.
2. Print these instructions on a computer printer.
3. Save these instructions in a file on your computer called `basics.pdf`. You should also be able to come back to your computer later, find your copy of the file on your computer, and view it on your screen.
4. Delete the file `basics.pdf` from your computer, and go back to reading the online version of the file at the book website for the next step.
5. Go to the book website and find the file `basics.pl`. Click on the file and download it to your computer. This is a text file that contains a simple program in the language Prolog. Your computer won't be able to do much with the file yet. That's fine.

6. Make a copy of the file `basics.pl` and call it `origbasics.pl`. This one is for safe keeping.
7. View the contents of the file `basics.pl` in a text editor on your computer. You can use a basic editor like Notepad (Windows) or TextEdit (Mac) or `nedit` (Linux), or a much fancier one like Microsoft Word or `vi` or `emacs`.
Windows and Mac users: you will *not* be able to simply double-click the file; you will need to run the editor first, and then open the file from there.
8. Change the line in the file that says `myname('Sydney J. Hurtubise')`. so that your name appears between the single quotes.
9. Save the changed file as `mybasics.pl` on your computer. This needs to be saved as an *ordinary text file*, meaning no bold or italics, or anything with fonts or special formatting. These files are sometimes called “text only” or “plain text” or “ASCII” or “no formatting”.
10. Exit the editor leaving the file `basics.pl` unsaved and in its original state. It should be identical to `origbasics.pl`.
11. Print the file `mybasics.pl` on your printer and confirm that it is your name that appears between the single quotes.

That’s it. If you can do all of these, you are as computer literate as you need to be!

A.2 Files available online

For the record, here are all of the files that should be available online at the book website for downloading. First, there are the following special files:

`basics.pdf`: This appendix as a PDF file
`basics.pl`: A sample text file discussed above
`applescript.txt`: A file for Mac OS X users (Figure B.1, Page 274)
`wordUtils.pl`: A Prolog utility file used in Chapter 8 (Page 164)

Finally, there are all of the example Prolog programs that are presented in the text:

`family.pl`: The family example in Prolog (Figure 3.1, Page 42)
`likes.pl`: The likes example (Figure 3.11, Page 56)
`blocks.pl`: A blocks-world program (Figure 4.2, Page 66)
`left.pl`: A better procedure for the left predicate (Figure 4.6, Page 80)
`map.pl`: A map-colouring program (Figure 5.2, Page 87)

sudoku.pl: A Sudoku solver (Figure 5.5, Page 92)
factorial.pl: A program for n! (Figure 5.6, Page 98)
sendmore1.pl: SEND+MORE=MONEY v1 (Figure 5.7, Page 99)
sendmore2.pl: SEND+MORE=MONEY v2 (Figure 5.8, Page 101)
queens.pl: A solution to the 8-queens problem (Figure 5.11, Page 104)
logic1.pl: A solution to the first logic problem (Figure 5.13, Page 106)
logic2.pl: A solution to the second logic problem (Figure 5.14, Page 108)
zebra.pl: A solution to the zebra problem (Figure 5.15, Page 110)
schedule-top.pl: A classroom scheduler (Figure 5.17, Page 112)
schedule-aux.pl: Unavailable periods (Figure 5.18, Page 113)
regions.pl: The types of regions and their properties (Figure 6.3, Page 119)
sketch.pl: The sketch map interpretation (Figure 6.5, Page 121)
polyrules.pl: The rules for polyhedral objects (Figure 6.9, Page 124)
polyinterp.pl: Interpreting the edges in Figure 6.6 (Figure 6.10, Page 125)
cuboid.pl: Finding a cuboid in an image (Figure 6.13, Page 127)
occlusion.pl: Finding vertices with occlusion (Figure 6.15, Page 130)
blocks2.pl: The blocks-world program redone (Figure 7.1, Page 144)
nldb.pl: A world of people, parks, trees, hats (Figure 8.4, Page 155)
lexicon.pl: A lexicon in Prolog (Figure 8.5, Page 157)
np.pl: A parser of noun phrases in Prolog (Figure 8.6, Page 158)
yesno.pl: A parser for yes-no-questions (Figure 8.14, Page 165)
declarative.pl: A parser for declaratives (Figure 8.15, Page 168)
plan.pl: A general planner in Prolog (Figure 9.3, Page 179)
coins.pl: The three coins in Prolog (Figure 9.4, Page 180)
monkey.pl: The monkey and bananas in Prolog (Figure 9.6, Page 182)
bplan.pl: A general but bounded planner (Figure 9.8, Page 184)
puzzle2x3.pl: A 2x3 version of the 15 puzzle (Figure 9.10, Page 186)
raceto21.pl: Race to 21 in Prolog (Figure 10.2, Page 205)
gameplayer.pl: A general game player (Figure 10.5, Page 210)
tictactoe.pl: Tic-tac-toe in Prolog (Figure 10.6, Page 213)
playuser.pl: Playing an entire game (Figure 10.7, Page 215)
boxes.pl: Boxes in Prolog (Figure 10.13, Page 219)
minimax.pl: A minimax procedure in Prolog (Figure 10.17, Page 224)
estfc.pl: A forward-chaining procedure (Figure 11.4, Page 239)
est.pl: The final version of back-chaining (Figure 11.6, Page 241)
joints.pl: A knowledge base about sore joints (Figure 11.7, Page 243)
explain.pl: A general explanation program (Figure 11.8, Page 245)
cars.pl: A knowledge base about car trouble (Figure 11.9, Page 245)

`induce.pl`: The induce predicate in Prolog (Figure 11.11, Page 248)
`animals.pl`: An knowledge base about animals (Figure 11.12, Page 249)
`sat.pl`: A satisfiability program (Figure 11.13, Page 254)
`estsat.pl`: Entailment using satisfiability (Figure 11.14, Page 255)
`unsat.pl`: An unsatisfiability program (Figure 11.15, Page 257)