# Codes of the programs

In the following pages are the programs referred to in the earlier chapters of the book. They are transcribed as faithfully as circumstances permitted from originals composed and executed using an occam programming system. In the transcription, the structure of the text has been removed, leaving only the sequence of lines which you see here.

The programming system contains an editor for structured, folded texts. A fold is a sequence of lines that can be concealed behind a single line of the document, in the way that an inverted pleat conceals a length of material. The fixed format of occam programs makes it both easy, and desirable, to use hierarchical folding of a program to reveal the structure of the program.

It is harder to read 'flat', un-folded occam on paper than it is to read a well structured text using an editor that allows exploration of that structure. The need to present the code in this flat form has influenced its style somewhat: there are more small procedures than there might otherwise have been, and their definitions are less deeply nested than they might otherwise have been. In particular, almost none of the procedures in these programs have any free variables, as opposed to free names bound to constants.