

Notes on website /barnes22

This website contains the following items.

Plain text files of the six programs in the book which users are invited to download, compile and execute.

Some further notes on the programs including suggestions on how they might be enhanced.

The full answers to all exercises in the book as a pdf file. The answers included in the book cover only the first four chapters. To include all the answers would have increased the size of the book too much. But they are all here on the website.

Some additional notes on certain topics which were in some previous versions of the book but which no longer seem so mainstream. Nevertheless, they provide further interesting examples and so illuminate subtle features of the language. They are presented as further subsections of the book as pdf files:

15.6a on exception scope showing how an exception can be propagated so that it becomes anonymous but then can be further propagated in such a way that it can be handled once more by its proper name;

21.4a on multiple views which is a somewhat intriguing illustration of what one can do with access discriminants;

21.5a on double dispatching is an example of another way to implement passive iterators using dispatching rather than access to subprogram types.

Further detailed material on Ada 2022 including:

The full syntax for Ada 2022:

The table of container operations as in Section 24.12;

Plain text files of five new programs using features such as the package `Ada.Numerics.Big_Numbers`. The programs concern the RSA algorithm; Perfect numbers; and Factorization (three versions) using a method attributed to Pierre Fermat. There are also extensive notes on these programs.

And finally, a list of errata (which is empty at the moment).