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# MAPLE WORKSHEETS

## About the Worksheets

This README files gives instructions for the Maple programs. The programs are designed to run on a minimally figured computer that has a version of Maple 13 or later installed. The Maple programs are presented both as ASCII files with the extension .txt files and as maple worksheets with the extension .mw. The ASCII files can be edited with any standard editor but should be saved as “Text Only” files. The Maple worksheets need to be edited within Maple.

To run an algorithm using the Maple Worksheets, simply open the file in Maple. Once the file is opened, scroll to the top of the file and hit ENTER on the text portion of the

### RESTART

line. This will re-initialize all the variables in Maple and the program will execute.

To run an algorithm using the ASCII version, open the appropriate .txt file in Maple and select the “maple text” option. The file will then be loaded as a Maple worksheet, and you can proceed as described above.

All the programs require input of functions or data. When input is require, a dialog box will appear with the heading “Enter Command”. The program prints what input is expected in blue type at the bottom of the screen outside the dialog box. For the program to continue, the user should type the input in the dialog box and select “OK” or press the enter key.

Some of the programs require the input of large amounts of data or generate extensive output. To enable the programs to be run quickly and efficiently, the input data can be placed in data files and the data files read by the program. When the output is likely to be extensive, the programs have been constructed so that it is convenient to place the output directly into an output file. The program will prompt you for the form of the input or output you would like to use. For example, when running the program for Neville’s method, ALGO31.MW, you will a see a screen that states:

```
Choice of input method:
1.  Input entry by entry from the keyboard
2.  Input data from a text file
3.  Generate data using a function F
Choose 1, 2, or 3 please
```

If you choose 1 you will need to enter all the data for the program from the keyboard, and any mistake in a data entry will require the program to be rerun. Choosing 2 will lead to an input data file, in this case to ALG031.DTA. Choosing 3 causes Maple to ask you for an input function.

We are currently revising the Maple Worksheets. The newest versions have names that are in all capital letters, like

ALG021.mw

Programs that are still in the older format have names that are in all lower case letter, like

algo61.mw

The notation will, of course, be changed as we progress.