# DrScheme – a modern implementation of Scheme

Texas Instruments Scheme was developed in 1988. Many people who created their standards at the time of rich graphical user interfaces will agree that TI Scheme is ugly and obsolete. More tolerant people will focus on the essence of Scheme and try to benefit from ideas that are implemented in that language. We believe that all opinions have equal rights, and if we want to suggest a modern and comfortable environment to develop Scheme software, one of the best environments would be DrScheme.

You might start with the PLT Scheme and download software that is available for Windows, Macintosh, Linux, and Solaris:

> http://plt-scheme.org/

The DrScheme tutorial can be found at:

> http://maclab.cs.uchicago.edu/tutorials/DrScheme.html

A brief tour of DrScheme can be found at

> http://www.plt-scheme.org/software/drscheme/tour/

Software distribution place is

> http://planet.plt-scheme.org/

A rich collection of documentation can be found here:
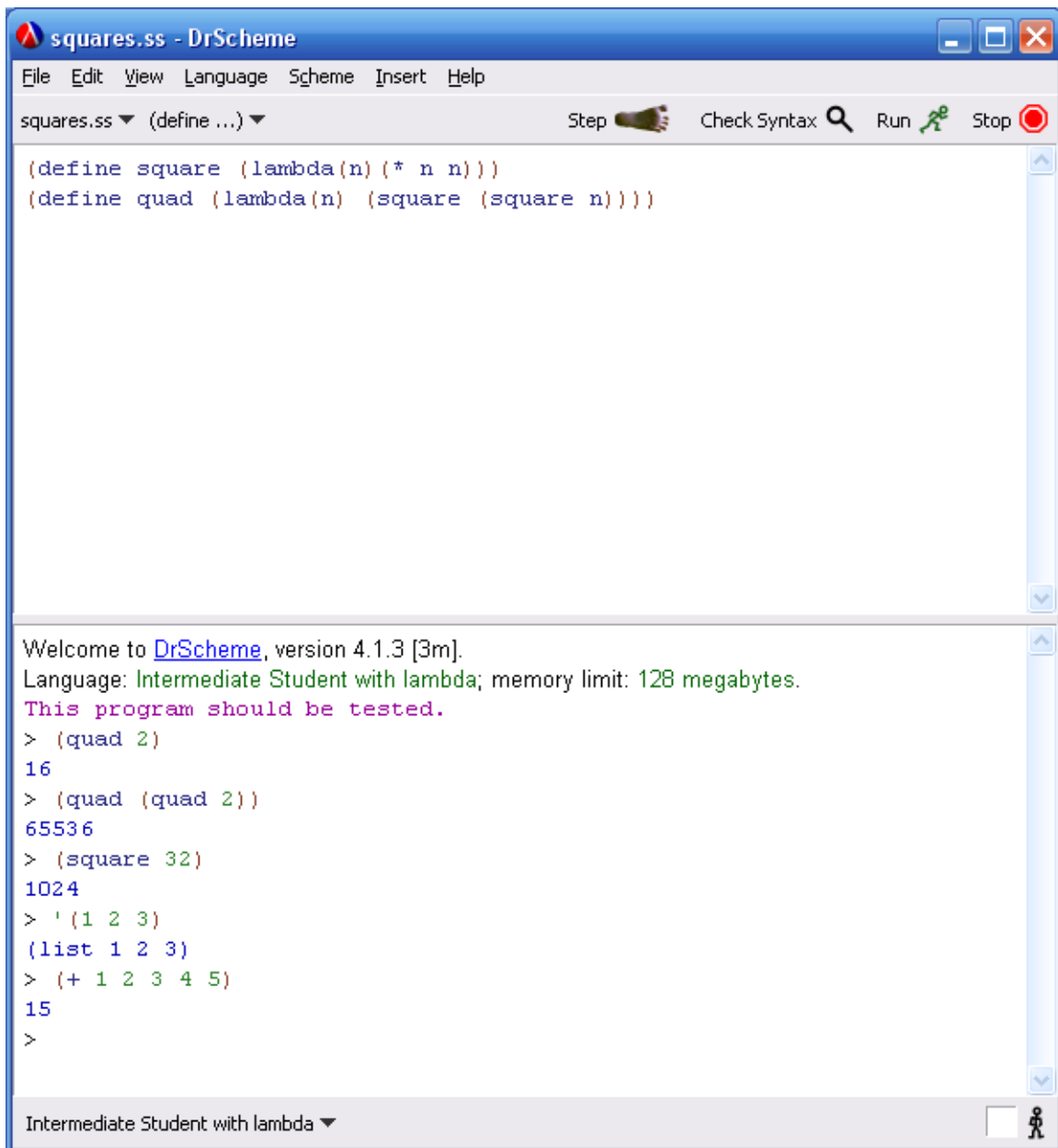
> http://docs.plt-scheme.org/

An important book, How to Design Programs - An Introduction to Computing and Programming by Matthias Felleisen , Robert Bruce Findler , Matthew Flatt , and Shriram Krishnamurthi can be found here:
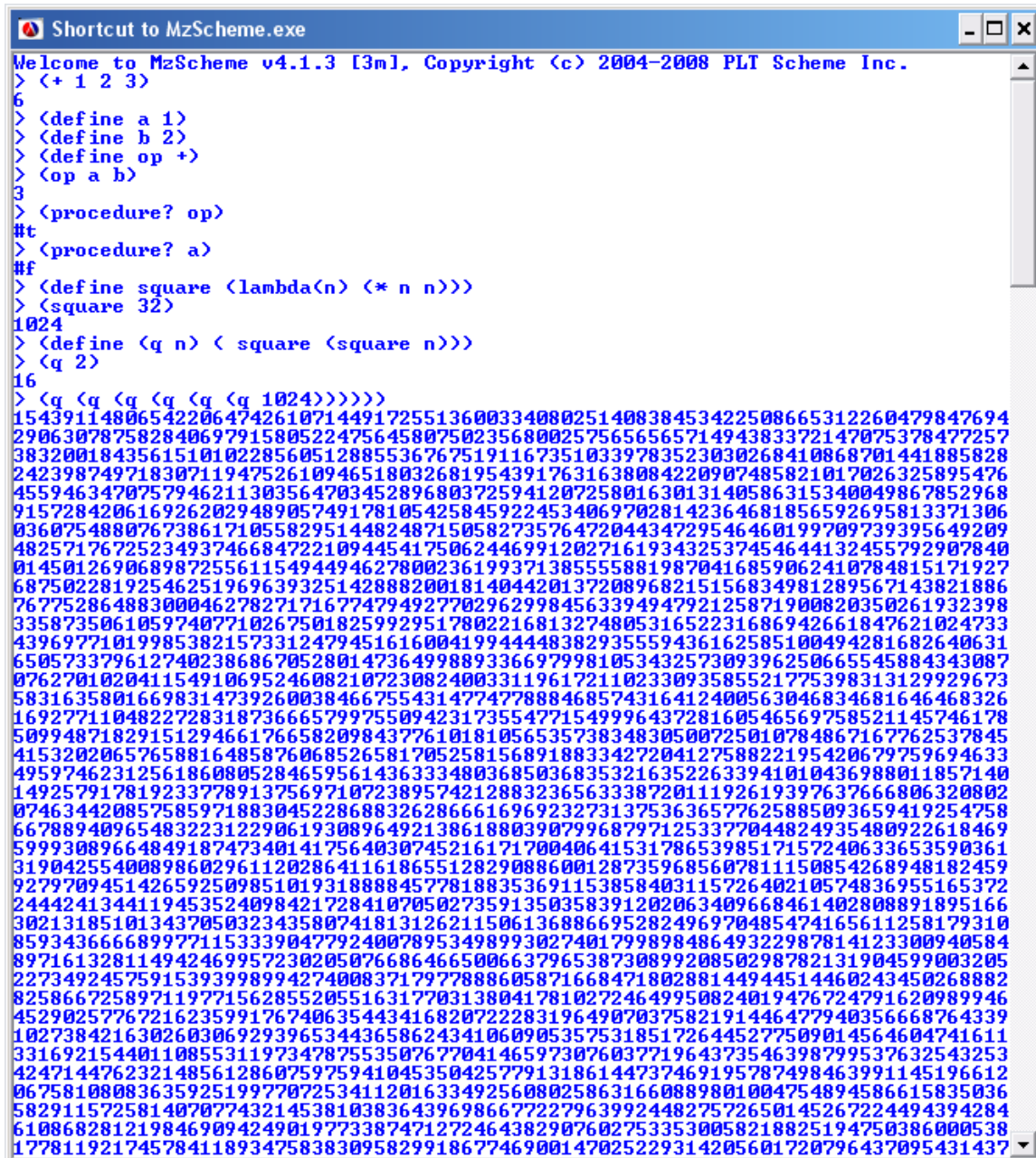
> http://www.htdp.org/2003-09-26/Book/

DrScheme is a dialect of Scheme that contains expansions and modifications with respect to the basic Scheme functionality that is built in the Texas Instruments Scheme and in the Geneva Scheme.

DrScheme offers a window where we can write definitions and a window where we can execute programs:

PLT Scheme also includes a command line version called **MzScheme** that creates a traditional command line window similar to TI Scheme and Geneva Scheme. In this environment you can test Scheme commands and short programs focusing on properties of the language, without mastering specific features of the windowed DrScheme environment.

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Shortcut to MzScheme.exe                                          _ □ ×
Welcome to MzScheme v4.1.3 [3m], Copyright (c) 2004-2008 PLT Scheme Inc.
> (+ 1 2 3)
6
> (define a 1)
> (define b 2)
> (define op +)
> (op a b)
3
> (procedure? op)
#t
> (procedure? a)
#f
> (define square (lambda(n) (* n n)))
> (square 32)
1024
> (define (q n) ( square (square n)))
> (q 2)
16
> (q (q (q (q (q (q 1024))))))
15439114806542206474261071449172551360033408025140838453422508665312260479847694
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