

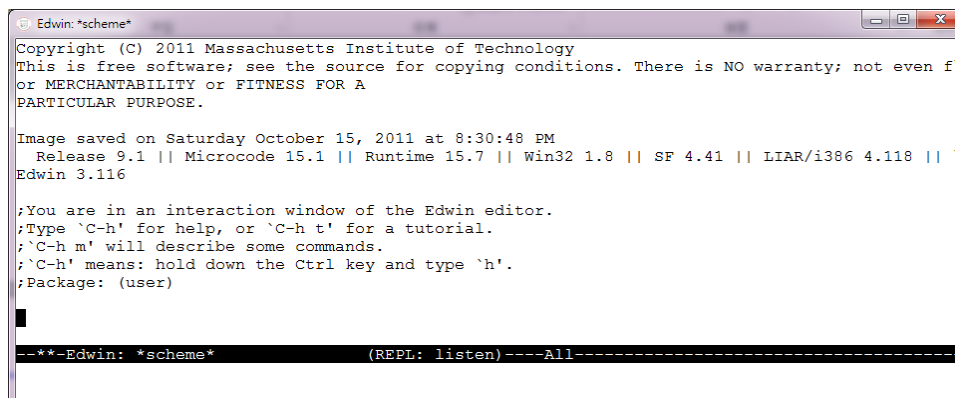
MIT scheme 教學

# Website

- Scheme 官方網站：
  - <http://www.gnu.org/software/mit-scheme/>
- Scheme 的 Windows 版本下載網址：
  - <http://ftp.gnu.org/gnu/mit-scheme/stable.pkg/9.1.1/mit-scheme-9.1.1-i386-win32.exe>
  - 版本：9.1.1（注意：只有9.0.0以上版本支援64bits 作業系統）
  - File size：19.6MB

# 開啟程式

- 安裝完後「開始>所有程式>MIT-GNU Scheme> MIT-GNU Scheme」開啟 Scheme Edwin系統

A screenshot of a Windows window titled "Edwin: \*scheme\*". The window contains the following text:

```
Copyright (C) 2011 Massachusetts Institute of Technology
This is free software; see the source for copying conditions. There is NO warranty; not even f
or MERCHANTABILITY or FITNESS FOR A
PARTICULAR PURPOSE.

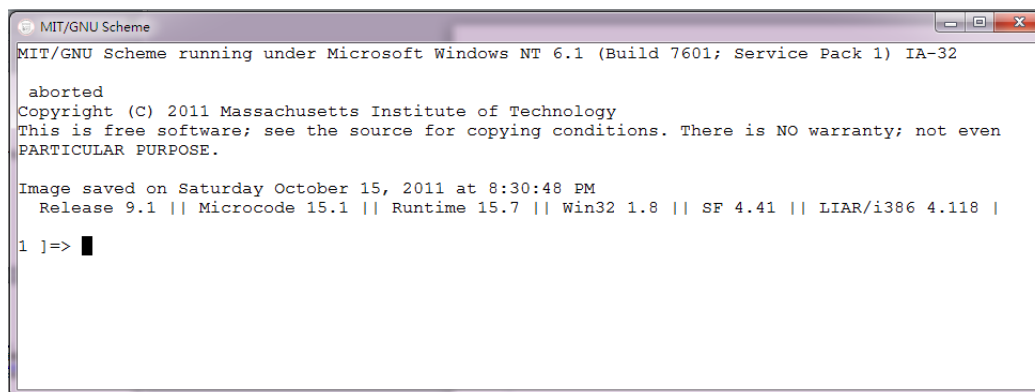
Image saved on Saturday October 15, 2011 at 8:30:48 PM
Release 9.1 || Microcode 15.1 || Runtime 15.7 || Win32 1.8 || SF 4.41 || LIAR/i386 4.118 || \
Edwin 3.116

;You are in an interaction window of the Edwin editor.
;Type 'C-h' for help, or 'C-h t' for a tutorial.
;'C-h m' will describe some commands.
;'C-h' means: hold down the Ctrl key and type 'h'.
;Package: (user)

■

--*-Edwin: *scheme* (REPL: listen)---All-----
```

- 於Edwin系統下按ctrl+x > c 後進入命令交互模式 (read-evaluation-print)

A screenshot of a Windows window titled "MIT/GNU Scheme". The window contains the following text:

```
MIT/GNU Scheme running under Microsoft Windows NT 6.1 (Build 7601; Service Pack 1) IA-32

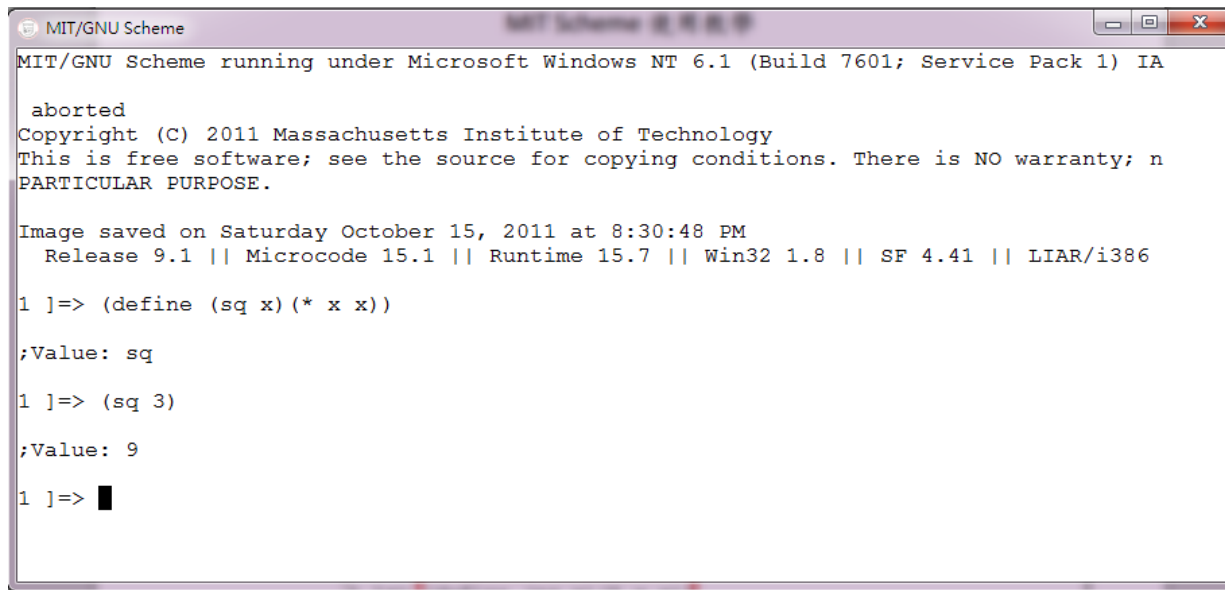
aborted
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Image saved on Saturday October 15, 2011 at 8:30:48 PM
Release 9.1 || Microcode 15.1 || Runtime 15.7 || Win32 1.8 || SF 4.41 || LIAR/i386 4.118 |

1 ]=> ■
```

# 利用REPL撰寫程式

- 進入命令交互程式(read-evaluation-print)後，即可開始撰寫程式：



```
MIT/GNU Scheme running under Microsoft Windows NT 6.1 (Build 7601; Service Pack 1) IA

aborted
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PARTICULAR PURPOSE.

Image saved on Saturday October 15, 2011 at 8:30:48 PM
  Release 9.1 || Microcode 15.1 || Runtime 15.7 || Win32 1.8 || SF 4.41 || LIAR/i386

1 ]=> (define (sq x) (* x x))

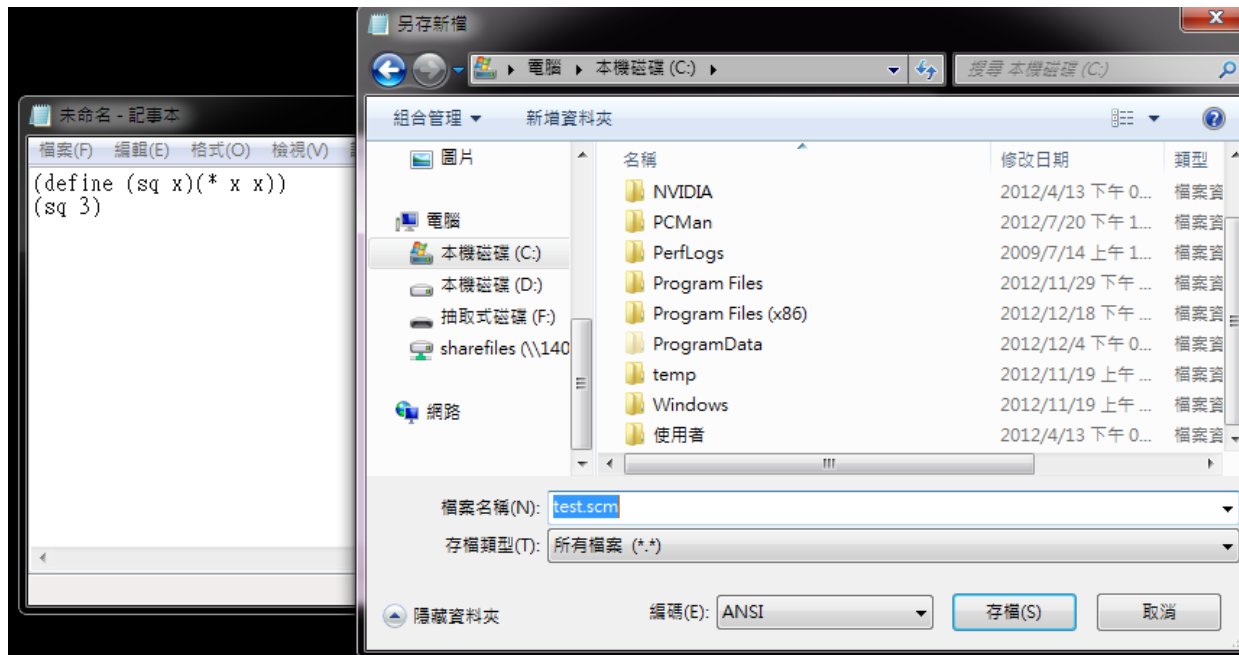
;Value: sq

1 ]=> (sq 3)

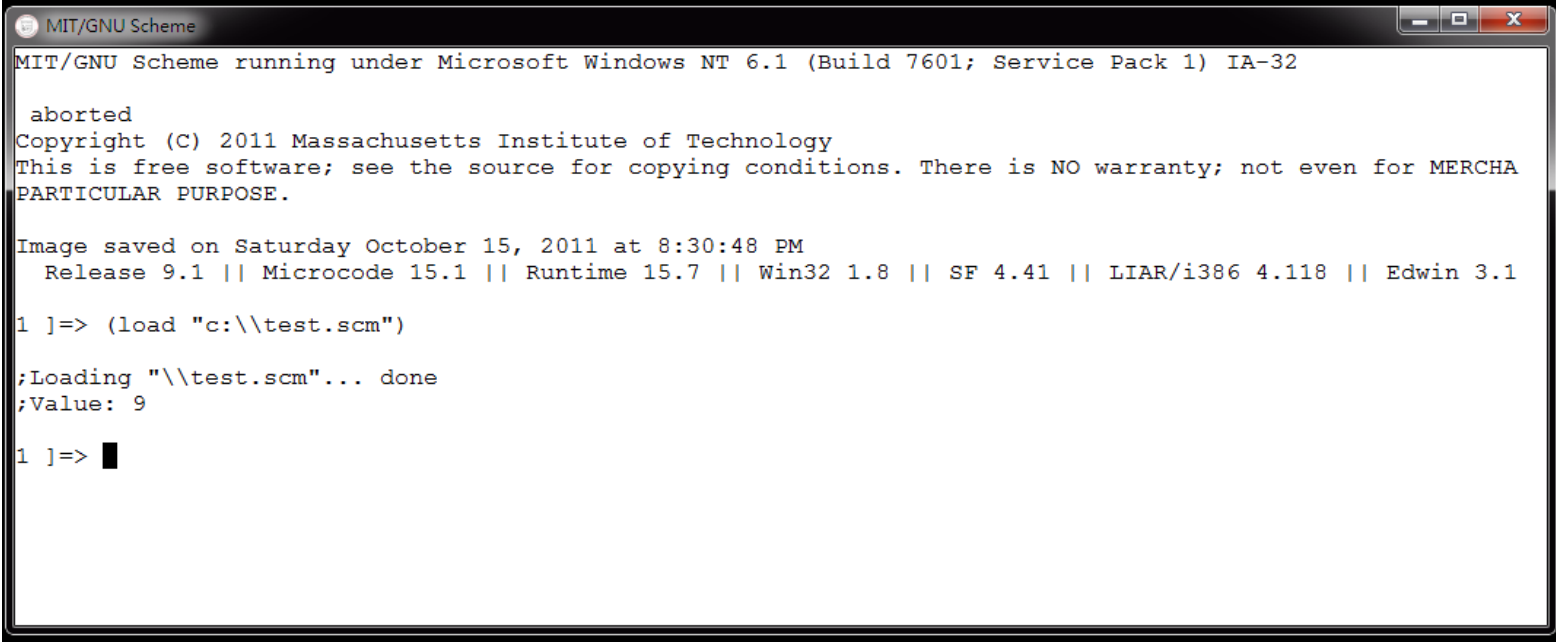
;Value: 9

1 ]=> █
```

- 利用記事本或其他文字編輯器編輯，將檔案存成附檔名.scm。
  - 存檔前請先記得將所存檔案所在的磁碟中點選:工具（組合管理）>資料夾選項>檢視，將[隱藏已知檔案類型的副檔名]上的打勾清除，且所存的檔案請務必副檔名一定要是 scm,如下圖所示,否則將會出現load 後找不到要匯入的檔案。



- 在REPL下輸入「(load "filepath")」即可將程式載入執行。
  - File path需為絕對路徑，以C槽下temp資料夾為例：c:\\temp\\test.scm



```
MIT/GNU Scheme running under Microsoft Windows NT 6.1 (Build 7601; Service Pack 1) IA-32

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PARTICULAR PURPOSE.

Image saved on Saturday October 15, 2011 at 8:30:48 PM
  Release 9.1 || Microcode 15.1 || Runtime 15.7 || Win32 1.8 || SF 4.41 || LIAR/i386 4.118 || Edwin 3.1

1 ]=> (load "c:\\temp\\test.scm")

;Loading "\\temp\\test.scm"... done
;Value: 9

1 ]=> █
```

- 參考資料：

- [http://www.math.pku.edu.cn/teachers/qiuzy/progtech/scheme/MIT\\_Scheme\\_doc/mit-scheme-user/index.html](http://www.math.pku.edu.cn/teachers/qiuzy/progtech/scheme/MIT_Scheme_doc/mit-scheme-user/index.html)
- [http://www.math.pku.edu.cn/teachers/qiuzy/progtech/scheme/mit\\_scheme.htm](http://www.math.pku.edu.cn/teachers/qiuzy/progtech/scheme/mit_scheme.htm)
- <http://jounq.im.ntu.edu.tw/teaching/pl/2003/scheme/SchemeReadme.htm>