

Documentation to download and set up aima lisp on hopper

<http://aima.cs.berkeley.edu/lisp/doc/overview.html>

Downloaded code.tar from website and sftp'd to 4480/aima\_lisp/

```
mmartin@hopper.csustan.edu:(~/4480/aima_lisp) tar xvf code.tar
mmartin@hopper.csustan.edu:(~/4480/aima_lisp) pico aima.lisp
(defparameter *aima-root* (truename "/user/dept/<your name>/4480/aima_lisp/");
<<<<<<<< Edit this <<<<<<<
```

```
(load "aima.lisp")
(aima-load 'all)
(aima-compile)
(test 'all)
```

```
SKIPPED ERROR IN WUMPUS WORLD
HAD TO CONTINUE THREE TIMES DURING COMPILATION
results of these commands are after #####
```

```
[1]> (load "aima.lisp")
[2]> (aima-load 'search)
      continued through wumpus world error on KILL
[4]> (test 'search)
```

```
[5]> (SETQ P1 (MAKE-CANNIBAL-PROBLEM :INITIAL-STATE (MAKE-CANNIBAL-
STATE :M1 2 :C1 1)))
#<a CANNIBAL-PROBLEM>
```

```
[6]> (SOLVE P1)
```

Action	State
=====	=====
	(2 1 1 0 0 0)
(1 1 1)	(1 0 0 1 1 1)
(-1 0 -1)	(2 0 1 0 1 0)
(2 0 1)	(0 0 0 2 1 1)
=====	=====

```
Total of 7 nodes expanded.
```

```
#<NODE f(3) = g(3) + h(0) state:(0 0 0 2 1 1)>
```

```
[7]> (RUN-GAME (MAKE-TTT-GAME))
      plays a 3x3 game
```

```
[8]>(RUN-GAME (MAKE-TTT-GAME :N 4) :AGENTS '(RANDOM-GAME-AGENT
ALPHA-BETA-TTT-AGENT))
```

```
[9]> (RUN-GAME (MAKE-TTT-GAME :N 5) :AGENTS '(RANDOM-GAME-AGENT
ALPHA-BETA-TTT-AGENT))
```

```
[10]>(RUN-GAME (MAKE-TTT-GAME :N 5) )
[11]>(RUN-ENVIRONMENT (MAKE-WUMPUS-WORLD :MAX-STEPS 10))

[13]> (SOLVE (MAKE-CANNIBAL-PROBLEM) 'NO-DUPLICATES-BREADTH-FIRST-SEARCH)
[15]> (SOLVE (MAKE-CANNIBAL-PROBLEM) 'a*-search)
[16]> (SOLVE (MAKE-CANNIBAL-PROBLEM) 'tree-ida*-search)
[17]> (SOLVE (MAKE-CANNIBAL-PROBLEM) 'no-cycles-depth-first-search)
```

```
#####
```

```
[1]> (load "aima.lisp")
;; Loading file aima.lisp ...
;; Loading file /user/dept/mmartin/4480/aima_lisp/utilities/utilities.lisp ...
;; Loaded file /user/dept/mmartin/4480/aima_lisp/utilities/utilities.lisp
;; Loading file /user/dept/mmartin/4480/aima_lisp/utilities/binary-tree.lisp ...
;; Loaded file /user/dept/mmartin/4480/aima_lisp/utilities/binary-tree.lisp
;; Loading file /user/dept/mmartin/4480/aima_lisp/utilities/queue.lisp ...
;; Loaded file /user/dept/mmartin/4480/aima_lisp/utilities/queue.lisp
;; Loading file /user/dept/mmartin/4480/aima_lisp/utilities/cltl2.lisp ...
;; Loaded file /user/dept/mmartin/4480/aima_lisp/utilities/cltl2.lisp
;; Loading file /user/dept/mmartin/4480/aima_lisp/utilities/test-utilities.lisp ...
;; Loaded file /user/dept/mmartin/4480/aima_lisp/utilities/test-utilities.lisp
;; Loaded file aima.lisp
T
[2]> (aima-load 'all)
;; Loading file /user/dept/mmartin/4480/aima_lisp/agents/test-agents.lisp ...
;; Loaded file /user/dept/mmartin/4480/aima_lisp/agents/test-agents.lisp
;; Loading file /user/dept/mmartin/4480/aima_lisp/agents/environments/basic-env.lisp ...
;; Loaded file /user/dept/mmartin/4480/aima_lisp/agents/environments/basic-env.lisp
;; Loading file /user/dept/mmartin/4480/aima_lisp/agents/environments/grid-env.lisp ...
;; Loaded file /user/dept/mmartin/4480/aima_lisp/agents/environments/grid-env.lisp
;; Loading file /user/dept/mmartin/4480/aima_lisp/agents/environments/vacuum.lisp ...
;; Loaded file /user/dept/mmartin/4480/aima_lisp/agents/environments/vacuum.lisp
;; Loading file /user/dept/mmartin/4480/aima_lisp/agents/environments/wumpus.lisp ...
** - Continuable Error
DEFUN/DEFMACRO(KILL): #<PACKAGE POSIX> is locked
If you continue (by typing 'continue'): Ignore the lock and proceed
The following restarts are also available:
SKIP      :R1   skip (DEFUN KILL # ...)
STOP      :R2   stop loading file /user/dept/mmartin/4480/aima_lisp/agents/
environments/wumpus.lisp
ABORT     :R3   Abort main loop
Break 1 [3]> :R1
;; Loaded file /user/dept/mmartin/4480/aima_lisp/agents/environments/wumpus.lisp
;; Loading file /user/dept/mmartin/4480/aima_lisp/agents/agents/agent.lisp ...
.
```

. much more here

.

```
;; Loaded file /user/dept/mmartin/4480/aima_lisp/language/domains/grammars.lisp
```

T

```
[4]> (aima-compile)
```

```
;; Compiling file /user/dept/mmartin/4480/aima_lisp/utilities/utilities.lisp ...
```

```
;; Wrote file /user/dept/mmartin/4480/aima_lisp/utilities/utilities.fas
```

```
0 errors, 0 warnings
```

```
;; Loading file /user/dept/mmartin/4480/aima_lisp/utilities/utilities.fas ...
```

```
;; Loaded file /user/dept/mmartin/4480/aima_lisp/utilities/utilities.fas
```

```
;; Compiling file /user/dept/mmartin/4480/aima_lisp/utilities/binary-tree.lisp ...
```

```
;; Wrote file /user/dept/mmartin/4480/aima_lisp/utilities/binary-tree.fas
```

```
0 errors, 0 warnings
```

```
;; Loading file /user/dept/mmartin/4480/aima_lisp/utilities/binary-tree.fas ...
```

```
;; Loaded file /user/dept/mmartin/4480/aima_lisp/utilities/binary-tree.fas
```

```
;; Compiling file /user/dept/mmartin/4480/aima_lisp/utilities/queue.lisp ...
```

```
;; Wrote file /user/dept/mmartin/4480/aima_lisp/utilities/queue.fas
```

```
0 errors, 0 warnings
```

```
;; Loading file /user/dept/mmartin/4480/aima_lisp/utilities/queue.fas ...
```

```
;; Loaded file /user/dept/mmartin/4480/aima_lisp/utilities/queue.fas
```

```
;; Compiling file /user/dept/mmartin/4480/aima_lisp/utilities/ctl2.lisp ...
```

```
** - Continuable Error
```

```
DEFUN/DEFMACRO(WITH-SIMPLE-RESTART): #<PACKAGE COMMON-LISP> is  
locked
```

```
If you continue (by typing 'continue'): Ignore the lock and proceed
```

```
The following restarts are also available:
```

```
ABORT      :R1  Abort main loop
```

```
Break 1 [5]> continue
```

```
WARNING: DEFUN/DEFMACRO: redefining macro WITH-SIMPLE-RESTART in /user/  
dept/mmartin/4480/aima_lisp/utilities/ctl2.lisp,
```

```
was defined in
```

```
/opt/local/var/macports/build/
```

```
_opt_local_var_macports_sources_rsync.macports.org_release_ports_lang_clisp/  
work/clisp-2.47/src/condition.fas
```

```
** - Continuable Error
```

```
DEFUN/DEFMACRO(DESTRUCTURING-BIND): #<PACKAGE COMMON-LISP> is  
locked
```

```
If you continue (by typing 'continue'): Ignore the lock and proceed
```

```
The following restarts are also available:
```

```
ABORT      :R1  Abort main loop
```

```
Break 1 [6]> continue
```

```
WARNING: DEFUN/DEFMACRO: redefining macro DESTRUCTURING-BIND in /user/  
dept/mmartin/4480/aima_lisp/utilities/ctl2.lisp,
```

```
was defined in
```

```
/opt/local/var/macports/build/
```

```
_opt_local_var_macports_sources_rsync.macports.org_release_ports_lang_clisp/  
work/clisp-2.47/src/defs2.fas
```

```
;; Wrote file /user/dept/mmartin/4480/aima_lisp/utilities/cltl2.fas
The following functions were used but are deprecated:
  SPECIAL-FORM-P - Use SPECIAL-OPERATOR-P instead.
0 errors, 0 warnings
;; Loading file /user/dept/mmartin/4480/aima_lisp/utilities/cltl2.fas ...
WARNING: Replacing method #<STANDARD-METHOD (#<BUILT-IN-CLASS T>
#<BUILT-IN-CLASS T>)> in
      #<STANDARD-GENERIC-FUNCTION PRINT-STRUCTURE>
;; Loaded file /user/dept/mmartin/4480/aima_lisp/utilities/cltl2.fas
;; Compiling file /user/dept/mmartin/4480/aima_lisp/utilities/test-utilities.lisp ...
;; Wrote file /user/dept/mmartin/4480/aima_lisp/utilities/test-utilities.fas
0 errors, 0 warnings
.
. continue as necessary
.
;; Loading file /user/dept/mmartin/4480/aima_lisp/language/domains/grammars.fas ...
;; Loaded file /user/dept/mmartin/4480/aima_lisp/language/domains/grammars.fas
T
[8]> (test 'all)
```