shaz@ubuntu:~/Downloads$ ls

oyente-master pycharm-2021.1 z3-z3-4.5.0

shaz@ubuntu:~/Downloads$ cd z3-z3-4.5.0/

shaz@ubuntu:~/Downloads/z3-z3-4.5.0$ ls

build configure doc LICENSE.txt README.md scripts

CMakeLists.txt contrib examples README-CMake.md RELEASE\_NOTES src

shaz@ubuntu:~/Downloads/z3-z3-4.5.0$ python scripts/mk\_make.py — python

New component: 'util'

New component: 'polynomial'

New component: 'sat'

New component: 'nlsat'

New component: 'hilbert'

New component: 'simplex'

New component: 'automata'

New component: 'interval'

New component: 'realclosure'

New component: 'subpaving'

New component: 'ast'

New component: 'rewriter'

New component: 'normal\_forms'

New component: 'model'

New component: 'tactic'

New component: 'substitution'

New component: 'parser\_util'

New component: 'grobner'

New component: 'euclid'

New component: 'core\_tactics'

New component: 'sat\_tactic'

New component: 'arith\_tactics'

New component: 'nlsat\_tactic'

New component: 'subpaving\_tactic'

New component: 'aig\_tactic'

New component: 'solver'

New component: 'ackermannization'

New component: 'interp'

New component: 'cmd\_context'

New component: 'extra\_cmds'

New component: 'smt2parser'

New component: 'proof\_checker'

New component: 'simplifier'

New component: 'fpa'

New component: 'macros'

New component: 'pattern'

New component: 'bit\_blaster'

New component: 'smt\_params'

New component: 'proto\_model'

New component: 'smt'

New component: 'bv\_tactics'

New component: 'fuzzing'

New component: 'smt\_tactic'

New component: 'sls\_tactic'

New component: 'qe'

New component: 'duality'

New component: 'muz'

New component: 'dataflow'

New component: 'transforms'

New component: 'rel'

New component: 'pdr'

New component: 'clp'

New component: 'tab'

New component: 'bmc'

New component: 'ddnf'

New component: 'duality\_intf'

New component: 'fp'

New component: 'nlsat\_smt\_tactic'

New component: 'ufbv\_tactic'

New component: 'sat\_solver'

New component: 'smtlogic\_tactics'

New component: 'fpa\_tactics'

New component: 'portfolio'

New component: 'smtparser'

New component: 'opt'

New component: 'api'

New component: 'shell'

New component: 'test'

New component: 'api\_dll'

New component: 'dotnet'

New component: 'java'

New component: 'ml'

New component: 'cpp'

Python bindings directory was detected.

New component: 'python'

New component: 'python\_install'

New component: 'cpp\_example'

New component: 'z3\_tptp'

New component: 'c\_example'

New component: 'maxsat'

New component: 'dotnet\_example'

New component: 'java\_example'

New component: 'ml\_example'

New component: 'py\_example'

Generating src/util/version.h from src/util/version.h.in

Generated 'src/util/version.h'

Generating src/api/dotnet/Properties/AssemblyInfo.cs from src/api/dotnet/Properties/AssemblyInfo.cs.in

Generated 'src/opt/opt\_params.hpp'

Generated 'src/solver/combined\_solver\_params.hpp'

Generated 'src/nlsat/nlsat\_params.hpp'

Generated 'src/sat/sat\_params.hpp'

Generated 'src/sat/sat\_asymm\_branch\_params.hpp'

Generated 'src/sat/sat\_simplifier\_params.hpp'

Generated 'src/sat/sat\_scc\_params.hpp'

Generated 'src/ast/pp\_params.hpp'

Generated 'src/ast/simplifier/bv\_simplifier\_params\_helper.hpp'

Generated 'src/ast/simplifier/array\_simplifier\_params\_helper.hpp'

Generated 'src/ast/simplifier/arith\_simplifier\_params\_helper.hpp'

Generated 'src/ast/normal\_forms/nnf\_params.hpp'

Generated 'src/ast/pattern/pattern\_inference\_params\_helper.hpp'

Generated 'src/ast/fpa/fpa2bv\_rewriter\_params.hpp'

Generated 'src/ast/rewriter/array\_rewriter\_params.hpp'

Generated 'src/ast/rewriter/bv\_rewriter\_params.hpp'

Generated 'src/ast/rewriter/fpa\_rewriter\_params.hpp'

Generated 'src/ast/rewriter/rewriter\_params.hpp'

Generated 'src/ast/rewriter/poly\_rewriter\_params.hpp'

Generated 'src/ast/rewriter/arith\_rewriter\_params.hpp'

Generated 'src/ast/rewriter/bool\_rewriter\_params.hpp'

Generated 'src/model/model\_evaluator\_params.hpp'

Generated 'src/model/model\_params.hpp'

Generated 'src/ackermannization/ackermannize\_bv\_tactic\_params.hpp'

Generated 'src/ackermannization/ackermannization\_params.hpp'

Generated 'src/muz/base/fixedpoint\_params.hpp'

Generated 'src/smt/params/smt\_params\_helper.hpp'

Generated 'src/math/polynomial/algebraic\_params.hpp'

Generated 'src/math/realclosure/rcf\_params.hpp'

Generated 'src/interp/interp\_params.hpp'

Generated 'src/tactic/sls/sls\_params.hpp'

Generated 'src/tactic/smtlogics/qfufbv\_tactic\_params.hpp'

Generated 'src/parsers/util/parser\_params.hpp'

Generated 'src/ast/pattern/database.h'

Generated 'src/shell/install\_tactic.cpp'

Generated 'src/test/install\_tactic.cpp'

Generated 'src/api/dll/install\_tactic.cpp'

Generated 'src/shell/mem\_initializer.cpp'

Generated 'src/test/mem\_initializer.cpp'

Generated 'src/api/dll/mem\_initializer.cpp'

Generated 'src/shell/gparams\_register\_modules.cpp'

Generated 'src/test/gparams\_register\_modules.cpp'

Generated 'src/api/dll/gparams\_register\_modules.cpp'

Generated 'src/api/python/z3/z3consts.py

Generated 'src/api/api\_log\_macros.h'

Generated 'src/api/api\_log\_macros.cpp'

Generated 'src/api/api\_commands.cpp'

Generated 'src/api/python/z3/z3core.py'

Listing src/api/python/z3 ...

Compiling src/api/python/z3/\_\_init\_\_.py ...

Compiling src/api/python/z3/z3.py ...

Compiling src/api/python/z3/z3consts.py ...

Compiling src/api/python/z3/z3core.py ...

Compiling src/api/python/z3/z3num.py ...

Compiling src/api/python/z3/z3poly.py ...

Compiling src/api/python/z3/z3printer.py ...

Compiling src/api/python/z3/z3rcf.py ...

Compiling src/api/python/z3/z3types.py ...

Compiling src/api/python/z3/z3util.py ...

Generated python bytecode

Copied 'z3printer.py'

Copied 'z3consts.py'

Copied 'z3poly.py'

Copied 'z3.py'

Copied '\_\_init\_\_.py'

Copied 'z3num.py'

Copied 'z3types.py'

Copied 'z3util.py'

Copied 'z3core.py'

Copied 'z3rcf.py'

Copied 'z3util.pyc'

Copied 'z3poly.pyc'

Copied 'z3core.pyc'

Copied '\_\_init\_\_.pyc'

Copied 'z3.pyc'

Copied 'z3rcf.pyc'

Copied 'z3printer.pyc'

Copied 'z3types.pyc'

Copied 'z3consts.pyc'

Copied 'z3num.pyc'

Testing ar...

Traceback (most recent call last):

File "scripts/mk\_make.py", line 21, in <module>

mk\_makefile()

File "/home/shaz/Downloads/z3-z3-4.5.0/scripts/mk\_util.py", line 2567, in mk\_makefile

mk\_config()

File "/home/shaz/Downloads/z3-z3-4.5.0/scripts/mk\_util.py", line 2391, in mk\_config

check\_ar()

File "/home/shaz/Downloads/z3-z3-4.5.0/scripts/mk\_util.py", line 516, in check\_ar

raise MKException('%s (archive tool) was not found' % AR)

mk\_exception.MKException: 'ar (archive tool) was not found'

shaz@ubuntu:~/Downloads/z3-z3-4.5.0$ cd build

shaz@ubuntu:~/Downloads/z3-z3-4.5.0/build$ ls

config.mk python

shaz@ubuntu:~/Downloads/z3-z3-4.5.0/build$ make

Command 'make' not found, but can be installed with:

sudo apt install make # version 4.2.1-1.2, or

sudo apt install make-guile # version 4.2.1-1.2

shaz@ubuntu:~/Downloads/z3-z3-4.5.0/build$ sudo apt install make

[sudo] password for shaz:

Reading package lists... Done

Building dependency tree

Reading state information... Done

Suggested packages:

make-doc

The following NEW packages will be installed:

make

0 upgraded, 1 newly installed, 0 to remove and 136 not upgraded.

Need to get 162 kB of archives.

After this operation, 393 kB of additional disk space will be used.

Get:1 http://us.archive.ubuntu.com/ubuntu focal/main amd64 make amd64 4.2.1-1.2 [162 kB]

Fetched 162 kB in 4s (42.9 kB/s)

Selecting previously unselected package make.

(Reading database ... 184831 files and directories currently installed.)

Preparing to unpack .../make\_4.2.1-1.2\_amd64.deb ...

Unpacking make (4.2.1-1.2) ...

Setting up make (4.2.1-1.2) ...

Processing triggers for man-db (2.9.1-1) ...

shaz@ubuntu:~/Downloads/z3-z3-4.5.0/build$ cd /

shaz@ubuntu:/$ ls

bin dev lib libx32 mnt root snap sys var

boot etc lib32 lost+found opt run srv tmp

cdrom home lib64 media proc sbin swapfile usr

shaz@ubuntu:/$ cd home

shaz@ubuntu:/home$ ls

shaz

shaz@ubuntu:/home$ cd shaz

shaz@ubuntu:~$ ls

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shaz@ubuntu:~$ cd Downloads/

shaz@ubuntu:~/Downloads$ ls

oyente-master pycharm-2021.1 z3-z3-4.5.0

shaz@ubuntu:~/Downloads$ cd pycharm-2021.1/bin/

shaz@ubuntu:~/Downloads/pycharm-2021.1/bin$ ls

format.sh inspect.sh printenv.py pycharm.svg

fsnotifier libdbm64.so pycharm64.vmoptions pycharm.vmoptions

fsnotifier64 log.xml pycharm.png restart.py

idea.properties ltedit.sh pycharm.sh

shaz@ubuntu:~/Downloads/pycharm-2021.1/bin$ sh pycharm.sh

2021-04-17 23:10:39,153 [ 3247] WARN - llij.ide.plugins.PluginManager - Resource bundle redefinition for plugin 'com.jetbrains.pycharm.pro.customization'. Old value: messages.ActionsBundle, new value: messages.PyBundle

2021-04-17 23:10:50,306 [ 14400] WARN - nSystem.impl.ActionManagerImpl - keymap "Visual Studio" not found [Plugin: com.intellij]

2021-04-17 23:10:50,372 [ 14466] WARN - nSystem.impl.ActionManagerImpl - keymap "Eclipse" not found [Plugin: com.intellij]

2021-04-17 23:10:50,373 [ 14467] WARN - nSystem.impl.ActionManagerImpl - keymap "NetBeans 6.5" not found [Plugin: com.intellij]

2021-04-17 23:10:50,373 [ 14467] WARN - nSystem.impl.ActionManagerImpl - keymap "Visual Studio" not found [Plugin: com.intellij]

2021-04-17 23:10:50,469 [ 14563] WARN - nSystem.impl.ActionManagerImpl - keymap "Visual Studio" not found [Plugin: HtmlTools]

2021-04-17 23:10:51,514 [ 15608] WARN - nSystem.impl.ActionManagerImpl - keymap "Eclipse" not found [Plugin: org.jetbrains.plugins.github]

2021-04-17 23:10:51,772 [ 15866] WARN - nSystem.impl.ActionManagerImpl - keymap "Eclipse" not found [Plugin: JavaScript]

2021-04-17 23:10:51,772 [ 15866] WARN - nSystem.impl.ActionManagerImpl - keymap "Visual Studio" not found [Plugin: JavaScript]

2021-04-17 23:10:51,925 [ 16019] WARN - nSystem.impl.ActionManagerImpl - keymap "Eclipse" not found [Plugin: Pythonid]

2021-04-17 23:10:51,925 [ 16019] WARN - nSystem.impl.ActionManagerImpl - keymap "NetBeans 6.5" not found [Plugin: Pythonid]

2021-04-17 23:10:51,955 [ 16049] WARN - nSystem.impl.ActionManagerImpl - keymap "Visual Studio" not found [Plugin: Pythonid]

2021-04-17 23:10:51,955 [ 16049] WARN - nSystem.impl.ActionManagerImpl - keymap "Eclipse" not found [Plugin: Pythonid]

2021-04-17 23:10:57,038 [ 21132] WARN - .diagnostic.PerformanceWatcher - UI was frozen for 6328ms, details saved to /home/shaz/.cache/JetBrains/PyCharm2021.1/log/threadDumps-freeze-20210417-231055-PY-211.6693.115-6sec

2021-04-17 23:23:15,879 [ 759973] WARN - com.intellij.util.xmlb.Binding - no accessors for com.intellij.openapi.updateSettings.impl.pluginsAdvertisement.PluginAdvertiserExtensionsStateService$State

^C2021-04-17 23:26:18,019 [ 942113] WARN - pl.local.NativeFileWatcherImpl - Watcher terminated with exit code 130

shaz@ubuntu:~/Downloads/pycharm-2021.1/bin$ cd ..

shaz@ubuntu:~/Downloads/pycharm-2021.1$ cd ..

shaz@ubuntu:~/Downloads$ cd ..

shaz@ubuntu:~$ ls

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shaz@ubuntu:~$ cd Downloads/

shaz@ubuntu:~/Downloads$ ls

oyente-master pycharm-2021.1 z3-z3-4.5.0

shaz@ubuntu:~/Downloads$ cd z3-z3-4.5.0/

shaz@ubuntu:~/Downloads/z3-z3-4.5.0$ sudo apt-get install libz3-dev

[sudo] password for shaz:

Reading package lists... Done

Building dependency tree

Reading state information... Done

The following additional packages will be installed:

libz3-4

The following NEW packages will be installed:

libz3-4 libz3-dev

0 upgraded, 2 newly installed, 0 to remove and 136 not upgraded.

Need to get 6,859 kB of archives.

After this operation, 23.2 MB of additional disk space will be used.

Do you want to continue? [Y/n] Y

Get:1 http://us.archive.ubuntu.com/ubuntu focal/universe amd64 libz3-4 amd64 4.8.7-4build1 [6,792 kB]

Get:2 http://us.archive.ubuntu.com/ubuntu focal/universe amd64 libz3-dev amd64 4.8.7-4build1 [67.5 kB]

Fetched 6,859 kB in 53s (130 kB/s)

Selecting previously unselected package libz3-4:amd64.

(Reading database ... 184847 files and directories currently installed.)

Preparing to unpack .../libz3-4\_4.8.7-4build1\_amd64.deb ...

Unpacking libz3-4:amd64 (4.8.7-4build1) ...

Selecting previously unselected package libz3-dev:amd64.

Preparing to unpack .../libz3-dev\_4.8.7-4build1\_amd64.deb ...

Unpacking libz3-dev:amd64 (4.8.7-4build1) ...

Setting up libz3-4:amd64 (4.8.7-4build1) ...

Setting up libz3-dev:amd64 (4.8.7-4build1) ...

Processing triggers for libc-bin (2.31-0ubuntu9.2) ...

shaz@ubuntu:~/Downloads/z3-z3-4.5.0$ cd ..

shaz@ubuntu:~/Downloads$ cd ..

shaz@ubuntu:~$ ls

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shaz@ubuntu:~$ cd Downloads/

shaz@ubuntu:~/Downloads$ ls

oyente-master pycharm-2021.1 z3-z3-4.5.0

shaz@ubuntu:~/Downloads$ cd pycharm-2021.1/

shaz@ubuntu:~/Downloads/pycharm-2021.1$ ls

bin brokenPlugins.db build.txt classpath.txt debug-eggs help icons.db Install-Linux-tar.txt jbr lib license plugins product-info.json

shaz@ubuntu:~/Downloads/pycharm-2021.1$ cd bin/

shaz@ubuntu:~/Downloads/pycharm-2021.1/bin$ ls

format.sh fsnotifier fsnotifier64 idea.properties inspect.sh libdbm64.so log.xml ltedit.sh printenv.py pycharm64.vmoptions pycharm.png pycharm.sh pycharm.svg pycharm.vmoptions restart.py

shaz@ubuntu:~/Downloads/pycharm-2021.1/bin$ sh pycharm.sh

2021-04-17 23:29:28,178 [ 1013] WARN - llij.ide.plugins.PluginManager - Resource bundle redefinition for plugin 'com.jetbrains.pycharm.pro.customization'. Old value: messages.ActionsBundle, new value: messages.PyBundle

2021-04-17 23:29:32,944 [ 5779] WARN - nSystem.impl.ActionManagerImpl - keymap "Visual Studio" not found [Plugin: com.intellij]

2021-04-17 23:29:32,964 [ 5799] WARN - nSystem.impl.ActionManagerImpl - keymap "Eclipse" not found [Plugin: com.intellij]

2021-04-17 23:29:32,976 [ 5811] WARN - nSystem.impl.ActionManagerImpl - keymap "NetBeans 6.5" not found [Plugin: com.intellij]

2021-04-17 23:29:32,979 [ 5814] WARN - nSystem.impl.ActionManagerImpl - keymap "Visual Studio" not found [Plugin: com.intellij]

2021-04-17 23:29:33,074 [ 5909] WARN - nSystem.impl.ActionManagerImpl - keymap "Visual Studio" not found [Plugin: HtmlTools]

2021-04-17 23:29:33,256 [ 6091] WARN - nSystem.impl.ActionManagerImpl - keymap "Eclipse" not found [Plugin: org.jetbrains.plugins.github]

2021-04-17 23:29:33,303 [ 6138] WARN - nSystem.impl.ActionManagerImpl - keymap "Eclipse" not found [Plugin: JavaScript]

2021-04-17 23:29:33,304 [ 6139] WARN - nSystem.impl.ActionManagerImpl - keymap "Visual Studio" not found [Plugin: JavaScript]

2021-04-17 23:29:33,403 [ 6238] WARN - nSystem.impl.ActionManagerImpl - keymap "Eclipse" not found [Plugin: Pythonid]

2021-04-17 23:29:33,403 [ 6238] WARN - nSystem.impl.ActionManagerImpl - keymap "NetBeans 6.5" not found [Plugin: Pythonid]

2021-04-17 23:29:33,409 [ 6244] WARN - nSystem.impl.ActionManagerImpl - keymap "Visual Studio" not found [Plugin: Pythonid]

2021-04-17 23:29:33,409 [ 6244] WARN - nSystem.impl.ActionManagerImpl - keymap "Eclipse" not found [Plugin: Pythonid]

2021-04-17 23:36:25,226 [ 418061] WARN - com.intellij.util.xmlb.Binding - no accessors for com.intellij.openapi.updateSettings.impl.pluginsAdvertisement.PluginAdvertiserExtensionsStateService$State

2021-04-17 23:36:25,226 [ 418061] WARN - com.intellij.util.xmlb.Binding - no accessors for com.intellij.openapi.updateSettings.impl.pluginsAdvertisement.PluginAdvertiserExtensionsStateService$State

^C2021-04-17 23:40:09,436 [ 642271] WARN - pl.local.NativeFileWatcherImpl - Watcher terminated with exit code 130

shaz@ubuntu:~/Downloads/pycharm-2021.1/bin$ cd ..

shaz@ubuntu:~/Downloads/pycharm-2021.1$ cd ..

shaz@ubuntu:~/Downloads$ ls

oyente-master pycharm-2021.1 z3-z3-4.5.0

shaz@ubuntu:~/Downloads$ ar

Command 'ar' not found, but can be installed with:

sudo apt install binutils

shaz@ubuntu:~/Downloads$ sudo apt install binutils

Reading package lists... Done

Building dependency tree

Reading state information... Done

The following additional packages will be installed:

binutils-common binutils-x86-64-linux-gnu libbinutils libctf-nobfd0 libctf0

Suggested packages:

binutils-doc

The following NEW packages will be installed:

binutils binutils-common binutils-x86-64-linux-gnu libbinutils libctf-nobfd0 libctf0

0 upgraded, 6 newly installed, 0 to remove and 136 not upgraded.

Need to get 2,392 kB of archives.

After this operation, 13.7 MB of additional disk space will be used.

Do you want to continue? [Y/n] Y

Get:1 http://us.archive.ubuntu.com/ubuntu focal-updates/main amd64 binutils-common amd64 2.34-6ubuntu1.1 [207 kB]

Get:2 http://us.archive.ubuntu.com/ubuntu focal-updates/main amd64 libbinutils amd64 2.34-6ubuntu1.1 [475 kB]

Get:3 http://us.archive.ubuntu.com/ubuntu focal-updates/main amd64 libctf-nobfd0 amd64 2.34-6ubuntu1.1 [47.1 kB]

Get:4 http://us.archive.ubuntu.com/ubuntu focal-updates/main amd64 libctf0 amd64 2.34-6ubuntu1.1 [46.6 kB]

Get:5 http://us.archive.ubuntu.com/ubuntu focal-updates/main amd64 binutils-x86-64-linux-gnu amd64 2.34-6ubuntu1.1 [1,613 kB]

Get:6 http://us.archive.ubuntu.com/ubuntu focal-updates/main amd64 binutils amd64 2.34-6ubuntu1.1 [3,380 B]

Fetched 2,392 kB in 17s (141 kB/s)

Selecting previously unselected package binutils-common:amd64.

(Reading database ... 184869 files and directories currently installed.)

Preparing to unpack .../0-binutils-common\_2.34-6ubuntu1.1\_amd64.deb ...

Unpacking binutils-common:amd64 (2.34-6ubuntu1.1) ...

Selecting previously unselected package libbinutils:amd64.

Preparing to unpack .../1-libbinutils\_2.34-6ubuntu1.1\_amd64.deb ...

Unpacking libbinutils:amd64 (2.34-6ubuntu1.1) ...

Selecting previously unselected package libctf-nobfd0:amd64.

Preparing to unpack .../2-libctf-nobfd0\_2.34-6ubuntu1.1\_amd64.deb ...

Unpacking libctf-nobfd0:amd64 (2.34-6ubuntu1.1) ...

Selecting previously unselected package libctf0:amd64.

Preparing to unpack .../3-libctf0\_2.34-6ubuntu1.1\_amd64.deb ...

Unpacking libctf0:amd64 (2.34-6ubuntu1.1) ...

Selecting previously unselected package binutils-x86-64-linux-gnu.

Preparing to unpack .../4-binutils-x86-64-linux-gnu\_2.34-6ubuntu1.1\_amd64.deb ...

Unpacking binutils-x86-64-linux-gnu (2.34-6ubuntu1.1) ...

Selecting previously unselected package binutils.

Preparing to unpack .../5-binutils\_2.34-6ubuntu1.1\_amd64.deb ...

Unpacking binutils (2.34-6ubuntu1.1) ...

Setting up binutils-common:amd64 (2.34-6ubuntu1.1) ...

Setting up libctf-nobfd0:amd64 (2.34-6ubuntu1.1) ...

Setting up libbinutils:amd64 (2.34-6ubuntu1.1) ...

Setting up libctf0:amd64 (2.34-6ubuntu1.1) ...

Setting up binutils-x86-64-linux-gnu (2.34-6ubuntu1.1) ...

Setting up binutils (2.34-6ubuntu1.1) ...

Processing triggers for libc-bin (2.31-0ubuntu9.2) ...

Processing triggers for man-db (2.9.1-1) ...

shaz@ubuntu:~/Downloads$ ls

oyente-master pycharm-2021.1 z3-z3-4.5.0

shaz@ubuntu:~/Downloads$ cd pycharm-2021.1/

shaz@ubuntu:~/Downloads/pycharm-2021.1$ ls

bin brokenPlugins.db build.txt classpath.txt debug-eggs help icons.db Install-Linux-tar.txt jbr lib license plugins product-info.json

shaz@ubuntu:~/Downloads/pycharm-2021.1$ cd ..

shaz@ubuntu:~/Downloads$ cd ..

shaz@ubuntu:~$ ar

Usage: ar [emulation options] [-]{dmpqrstx}[abcDfilMNoOPsSTuvV] [--plugin <name>] [member-name] [count] archive-file file...

ar -M [<mri-script]

commands:

d - delete file(s) from the archive

m[ab] - move file(s) in the archive

p - print file(s) found in the archive

q[f] - quick append file(s) to the archive

r[ab][f][u] - replace existing or insert new file(s) into the archive

s - act as ranlib

t[O][v] - display contents of the archive

x[o] - extract file(s) from the archive

command specific modifiers:

[a] - put file(s) after [member-name]

[b] - put file(s) before [member-name] (same as [i])

[D] - use zero for timestamps and uids/gids (default)

[U] - use actual timestamps and uids/gids

[N] - use instance [count] of name

[f] - truncate inserted file names

[P] - use full path names when matching

[o] - preserve original dates

[O] - display offsets of files in the archive

[u] - only replace files that are newer than current archive contents

generic modifiers:

[c] - do not warn if the library had to be created

[s] - create an archive index (cf. ranlib)

[S] - do not build a symbol table

[T] - make a thin archive

[v] - be verbose

[V] - display the version number

@<file> - read options from <file>

--target=BFDNAME - specify the target object format as BFDNAME

--output=DIRNAME - specify the output directory for extraction operations

optional:

--plugin <p> - load the specified plugin

emulation options:

No emulation specific options

ar: supported targets: elf64-x86-64 elf32-i386 elf32-iamcu elf32-x86-64 pei-i386 pei-x86-64 elf64-l1om elf64-k1om elf64-little elf64-big elf32-little elf32-big pe-x86-64 pe-bigobj-x86-64 pe-i386 srec symbolsrec verilog tekhex binary ihex plugin

shaz@ubuntu:~$ ls

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shaz@ubuntu:~$ cd Downloads/

shaz@ubuntu:~/Downloads$ ls

oyente-master pycharm-2021.1 z3-z3-4.5.0

shaz@ubuntu:~/Downloads$ cd z3-z3-4.5.0/

shaz@ubuntu:~/Downloads/z3-z3-4.5.0$ ls

build CMakeLists.txt configure contrib doc examples LICENSE.txt README-CMake.md README.md RELEASE\_NOTES scripts src

shaz@ubuntu:~/Downloads/z3-z3-4.5.0$ python scripts/mk\_make.py -python

opt = -p, arg = ython

New component: 'util'

New component: 'polynomial'

New component: 'sat'

New component: 'nlsat'

New component: 'hilbert'

New component: 'simplex'

New component: 'automata'

New component: 'interval'

New component: 'realclosure'

New component: 'subpaving'

New component: 'ast'

New component: 'rewriter'

New component: 'normal\_forms'

New component: 'model'

New component: 'tactic'

New component: 'substitution'

New component: 'parser\_util'

New component: 'grobner'

New component: 'euclid'

New component: 'core\_tactics'

New component: 'sat\_tactic'

New component: 'arith\_tactics'

New component: 'nlsat\_tactic'

New component: 'subpaving\_tactic'

New component: 'aig\_tactic'

New component: 'solver'

New component: 'ackermannization'

New component: 'interp'

New component: 'cmd\_context'

New component: 'extra\_cmds'

New component: 'smt2parser'

New component: 'proof\_checker'

New component: 'simplifier'

New component: 'fpa'

New component: 'macros'

New component: 'pattern'

New component: 'bit\_blaster'

New component: 'smt\_params'

New component: 'proto\_model'

New component: 'smt'

New component: 'bv\_tactics'

New component: 'fuzzing'

New component: 'smt\_tactic'

New component: 'sls\_tactic'

New component: 'qe'

New component: 'duality'

New component: 'muz'

New component: 'dataflow'

New component: 'transforms'

New component: 'rel'

New component: 'pdr'

New component: 'clp'

New component: 'tab'

New component: 'bmc'

New component: 'ddnf'

New component: 'duality\_intf'

New component: 'fp'

New component: 'nlsat\_smt\_tactic'

New component: 'ufbv\_tactic'

New component: 'sat\_solver'

New component: 'smtlogic\_tactics'

New component: 'fpa\_tactics'

New component: 'portfolio'

New component: 'smtparser'

New component: 'opt'

New component: 'api'

New component: 'shell'

New component: 'test'

New component: 'api\_dll'

New component: 'dotnet'

New component: 'java'

New component: 'ml'

New component: 'cpp'

Python bindings directory was detected.

New component: 'python'

New component: 'python\_install'

New component: 'cpp\_example'

New component: 'z3\_tptp'

New component: 'c\_example'

New component: 'maxsat'

New component: 'dotnet\_example'

New component: 'java\_example'

New component: 'ml\_example'

New component: 'py\_example'

Generating src/util/version.h from src/util/version.h.in

Generated 'src/util/version.h'

Generating src/api/dotnet/Properties/AssemblyInfo.cs from src/api/dotnet/Properties/AssemblyInfo.cs.in

Generated 'src/opt/opt\_params.hpp'

Generated 'src/solver/combined\_solver\_params.hpp'

Generated 'src/nlsat/nlsat\_params.hpp'

Generated 'src/sat/sat\_params.hpp'

Generated 'src/sat/sat\_asymm\_branch\_params.hpp'

Generated 'src/sat/sat\_simplifier\_params.hpp'

Generated 'src/sat/sat\_scc\_params.hpp'

Generated 'src/ast/pp\_params.hpp'

Generated 'src/ast/simplifier/bv\_simplifier\_params\_helper.hpp'

Generated 'src/ast/simplifier/array\_simplifier\_params\_helper.hpp'

Generated 'src/ast/simplifier/arith\_simplifier\_params\_helper.hpp'

Generated 'src/ast/normal\_forms/nnf\_params.hpp'

Generated 'src/ast/pattern/pattern\_inference\_params\_helper.hpp'

Generated 'src/ast/fpa/fpa2bv\_rewriter\_params.hpp'

Generated 'src/ast/rewriter/array\_rewriter\_params.hpp'

Generated 'src/ast/rewriter/bv\_rewriter\_params.hpp'

Generated 'src/ast/rewriter/fpa\_rewriter\_params.hpp'

Generated 'src/ast/rewriter/rewriter\_params.hpp'

Generated 'src/ast/rewriter/poly\_rewriter\_params.hpp'

Generated 'src/ast/rewriter/arith\_rewriter\_params.hpp'

Generated 'src/ast/rewriter/bool\_rewriter\_params.hpp'

Generated 'src/model/model\_evaluator\_params.hpp'

Generated 'src/model/model\_params.hpp'

Generated 'src/ackermannization/ackermannize\_bv\_tactic\_params.hpp'

Generated 'src/ackermannization/ackermannization\_params.hpp'

Generated 'src/muz/base/fixedpoint\_params.hpp'

Generated 'src/smt/params/smt\_params\_helper.hpp'

Generated 'src/math/polynomial/algebraic\_params.hpp'

Generated 'src/math/realclosure/rcf\_params.hpp'

Generated 'src/interp/interp\_params.hpp'

Generated 'src/tactic/sls/sls\_params.hpp'

Generated 'src/tactic/smtlogics/qfufbv\_tactic\_params.hpp'

Generated 'src/parsers/util/parser\_params.hpp'

Generated 'src/ast/pattern/database.h'

Generated 'src/shell/install\_tactic.cpp'

Generated 'src/test/install\_tactic.cpp'

Generated 'src/api/dll/install\_tactic.cpp'

Generated 'src/shell/mem\_initializer.cpp'

Generated 'src/test/mem\_initializer.cpp'

Generated 'src/api/dll/mem\_initializer.cpp'

Generated 'src/shell/gparams\_register\_modules.cpp'

Generated 'src/test/gparams\_register\_modules.cpp'

Generated 'src/api/dll/gparams\_register\_modules.cpp'

Generated 'src/api/python/z3/z3consts.py

Generated 'src/api/api\_log\_macros.h'

Generated 'src/api/api\_log\_macros.cpp'

Generated 'src/api/api\_commands.cpp'

Generated 'src/api/python/z3/z3core.py'

Listing src/api/python/z3 ...

Compiling src/api/python/z3/\_\_init\_\_.py ...

Compiling src/api/python/z3/z3.py ...

Compiling src/api/python/z3/z3consts.py ...

Compiling src/api/python/z3/z3core.py ...

Compiling src/api/python/z3/z3num.py ...

Compiling src/api/python/z3/z3poly.py ...

Compiling src/api/python/z3/z3printer.py ...

Compiling src/api/python/z3/z3rcf.py ...

Compiling src/api/python/z3/z3types.py ...

Compiling src/api/python/z3/z3util.py ...

Generated python bytecode

Copied 'z3printer.py'

Copied 'z3consts.py'

Copied 'z3poly.py'

Copied 'z3.py'

Copied '\_\_init\_\_.py'

Copied 'z3num.py'

Copied 'z3types.py'

Copied 'z3util.py'

Copied 'z3core.py'

Copied 'z3rcf.py'

Copied 'z3util.pyc'

Copied 'z3poly.pyc'

Copied 'z3core.pyc'

Copied '\_\_init\_\_.pyc'

Copied 'z3.pyc'

Copied 'z3rcf.pyc'

Copied 'z3printer.pyc'

Copied 'z3types.pyc'

Copied 'z3consts.pyc'

Copied 'z3num.pyc'

Testing ar...

Testing g++...

Testing clang++...

Traceback (most recent call last):

File "scripts/mk\_make.py", line 21, in <module>

mk\_makefile()

File "/home/shaz/Downloads/z3-z3-4.5.0/scripts/mk\_util.py", line 2567, in mk\_makefile

mk\_config()

File "/home/shaz/Downloads/z3-z3-4.5.0/scripts/mk\_util.py", line 2392, in mk\_config

CXX = find\_cxx\_compiler()

File "/home/shaz/Downloads/z3-z3-4.5.0/scripts/mk\_util.py", line 527, in find\_cxx\_compiler

raise MKException('C++ compiler was not found. Try to set the environment variable CXX with the C++ compiler available in your system.')

mk\_exception.MKException: 'C++ compiler was not found. Try to set the environment variable CXX with the C++ compiler available in your system.'

shaz@ubuntu:~/Downloads/z3-z3-4.5.0$ cd ..

shaz@ubuntu:~/Downloads$ cd ..

shaz@ubuntu:~$ ls

Desktop Documents Downloads Music Pictures Public Templates Videos

shaz@ubuntu:~$ sudo apt install build-essential

Reading package lists... Done

Building dependency tree

Reading state information... Done

The following additional packages will be installed:

dpkg-dev fakeroot g++ g++-9 gcc gcc-9 libalgorithm-diff-perl libalgorithm-diff-xs-perl libalgorithm-merge-perl libasan5 libatomic1 libc-dev-bin libc6-dev libcrypt-dev libfakeroot libgcc-9-dev libitm1

liblsan0 libquadmath0 libstdc++-9-dev libtsan0 libubsan1 linux-libc-dev manpages-dev

Suggested packages:

debian-keyring g++-multilib g++-9-multilib gcc-9-doc gcc-multilib autoconf automake libtool flex bison gcc-doc gcc-9-multilib gcc-9-locales glibc-doc libstdc++-9-doc

The following NEW packages will be installed:

build-essential dpkg-dev fakeroot g++ g++-9 gcc gcc-9 libalgorithm-diff-perl libalgorithm-diff-xs-perl libalgorithm-merge-perl libasan5 libatomic1 libc-dev-bin libc6-dev libcrypt-dev libfakeroot

libgcc-9-dev libitm1 liblsan0 libquadmath0 libstdc++-9-dev libtsan0 libubsan1 linux-libc-dev manpages-dev

0 upgraded, 25 newly installed, 0 to remove and 136 not upgraded.

Need to get 28.8 MB of archives.

After this operation, 129 MB of additional disk space will be used.

Do you want to continue? [Y/n] Y

Get:1 http://us.archive.ubuntu.com/ubuntu focal-updates/main amd64 libc-dev-bin amd64 2.31-0ubuntu9.2 [71.8 kB]

Get:2 http://us.archive.ubuntu.com/ubuntu focal-updates/main amd64 linux-libc-dev amd64 5.4.0-72.80 [1,115 kB]

Get:3 http://us.archive.ubuntu.com/ubuntu focal/main amd64 libcrypt-dev amd64 1:4.4.10-10ubuntu4 [104 kB]

Get:4 http://us.archive.ubuntu.com/ubuntu focal-updates/main amd64 libc6-dev amd64 2.31-0ubuntu9.2 [2,520 kB]

Get:5 http://us.archive.ubuntu.com/ubuntu focal-updates/main amd64 libitm1 amd64 10.2.0-5ubuntu1~20.04 [26.4 kB]

Get:6 http://us.archive.ubuntu.com/ubuntu focal-updates/main amd64 libatomic1 amd64 10.2.0-5ubuntu1~20.04 [9,300 B]

Get:7 http://us.archive.ubuntu.com/ubuntu focal-updates/main amd64 libasan5 amd64 9.3.0-17ubuntu1~20.04 [394 kB]

Get:8 http://us.archive.ubuntu.com/ubuntu focal-updates/main amd64 liblsan0 amd64 10.2.0-5ubuntu1~20.04 [144 kB]

Get:9 http://us.archive.ubuntu.com/ubuntu focal-updates/main amd64 libtsan0 amd64 10.2.0-5ubuntu1~20.04 [320 kB]

Get:10 http://us.archive.ubuntu.com/ubuntu focal-updates/main amd64 libubsan1 amd64 10.2.0-5ubuntu1~20.04 [136 kB]

Get:11 http://us.archive.ubuntu.com/ubuntu focal-updates/main amd64 libquadmath0 amd64 10.2.0-5ubuntu1~20.04 [146 kB]

Get:12 http://us.archive.ubuntu.com/ubuntu focal-updates/main amd64 libgcc-9-dev amd64 9.3.0-17ubuntu1~20.04 [2,360 kB]

Get:13 http://us.archive.ubuntu.com/ubuntu focal-updates/main amd64 gcc-9 amd64 9.3.0-17ubuntu1~20.04 [8,241 kB]

Get:14 http://us.archive.ubuntu.com/ubuntu focal/main amd64 gcc amd64 4:9.3.0-1ubuntu2 [5,208 B]

Get:15 http://us.archive.ubuntu.com/ubuntu focal-updates/main amd64 libstdc++-9-dev amd64 9.3.0-17ubuntu1~20.04 [1,714 kB]

Get:16 http://us.archive.ubuntu.com/ubuntu focal-updates/main amd64 g++-9 amd64 9.3.0-17ubuntu1~20.04 [8,405 kB]

Get:17 http://us.archive.ubuntu.com/ubuntu focal/main amd64 g++ amd64 4:9.3.0-1ubuntu2 [1,604 B]

Get:18 http://us.archive.ubuntu.com/ubuntu focal/main amd64 dpkg-dev all 1.19.7ubuntu3 [679 kB]

Get:19 http://us.archive.ubuntu.com/ubuntu focal-updates/main amd64 build-essential amd64 12.8ubuntu1.1 [4,664 B]

Get:20 http://us.archive.ubuntu.com/ubuntu focal/main amd64 libfakeroot amd64 1.24-1 [25.7 kB]

Get:21 http://us.archive.ubuntu.com/ubuntu focal/main amd64 fakeroot amd64 1.24-1 [62.6 kB]

Get:22 http://us.archive.ubuntu.com/ubuntu focal/main amd64 libalgorithm-diff-perl all 1.19.03-2 [46.6 kB]

Get:23 http://us.archive.ubuntu.com/ubuntu focal/main amd64 libalgorithm-diff-xs-perl amd64 0.04-6 [11.3 kB]

Get:24 http://us.archive.ubuntu.com/ubuntu focal/main amd64 libalgorithm-merge-perl all 0.08-3 [12.0 kB]

Get:25 http://us.archive.ubuntu.com/ubuntu focal/main amd64 manpages-dev all 5.05-1 [2,266 kB]

Fetched 28.8 MB in 2min 45s (175 kB/s)

Selecting previously unselected package libc-dev-bin.

(Reading database ... 185135 files and directories currently installed.)

Preparing to unpack .../00-libc-dev-bin\_2.31-0ubuntu9.2\_amd64.deb ...

Unpacking libc-dev-bin (2.31-0ubuntu9.2) ...

Selecting previously unselected package linux-libc-dev:amd64.

Preparing to unpack .../01-linux-libc-dev\_5.4.0-72.80\_amd64.deb ...

Unpacking linux-libc-dev:amd64 (5.4.0-72.80) ...

Selecting previously unselected package libcrypt-dev:amd64.

Preparing to unpack .../02-libcrypt-dev\_1%3a4.4.10-10ubuntu4\_amd64.deb ...

Unpacking libcrypt-dev:amd64 (1:4.4.10-10ubuntu4) ...

Selecting previously unselected package libc6-dev:amd64.

Preparing to unpack .../03-libc6-dev\_2.31-0ubuntu9.2\_amd64.deb ...

Unpacking libc6-dev:amd64 (2.31-0ubuntu9.2) ...

Selecting previously unselected package libitm1:amd64.

Preparing to unpack .../04-libitm1\_10.2.0-5ubuntu1~20.04\_amd64.deb ...

Unpacking libitm1:amd64 (10.2.0-5ubuntu1~20.04) ...

Selecting previously unselected package libatomic1:amd64.

Preparing to unpack .../05-libatomic1\_10.2.0-5ubuntu1~20.04\_amd64.deb ...

Unpacking libatomic1:amd64 (10.2.0-5ubuntu1~20.04) ...

Selecting previously unselected package libasan5:amd64.

Preparing to unpack .../06-libasan5\_9.3.0-17ubuntu1~20.04\_amd64.deb ...

Unpacking libasan5:amd64 (9.3.0-17ubuntu1~20.04) ...

Selecting previously unselected package liblsan0:amd64.

Preparing to unpack .../07-liblsan0\_10.2.0-5ubuntu1~20.04\_amd64.deb ...

Unpacking liblsan0:amd64 (10.2.0-5ubuntu1~20.04) ...

Selecting previously unselected package libtsan0:amd64.

Preparing to unpack .../08-libtsan0\_10.2.0-5ubuntu1~20.04\_amd64.deb ...

Unpacking libtsan0:amd64 (10.2.0-5ubuntu1~20.04) ...

Selecting previously unselected package libubsan1:amd64.

Preparing to unpack .../09-libubsan1\_10.2.0-5ubuntu1~20.04\_amd64.deb ...

Unpacking libubsan1:amd64 (10.2.0-5ubuntu1~20.04) ...

Selecting previously unselected package libquadmath0:amd64.

Preparing to unpack .../10-libquadmath0\_10.2.0-5ubuntu1~20.04\_amd64.deb ...

Unpacking libquadmath0:amd64 (10.2.0-5ubuntu1~20.04) ...

Selecting previously unselected package libgcc-9-dev:amd64.

Preparing to unpack .../11-libgcc-9-dev\_9.3.0-17ubuntu1~20.04\_amd64.deb ...

Unpacking libgcc-9-dev:amd64 (9.3.0-17ubuntu1~20.04) ...

Selecting previously unselected package gcc-9.

Preparing to unpack .../12-gcc-9\_9.3.0-17ubuntu1~20.04\_amd64.deb ...

Unpacking gcc-9 (9.3.0-17ubuntu1~20.04) ...

Selecting previously unselected package gcc.

Preparing to unpack .../13-gcc\_4%3a9.3.0-1ubuntu2\_amd64.deb ...

Unpacking gcc (4:9.3.0-1ubuntu2) ...

Selecting previously unselected package libstdc++-9-dev:amd64.

Preparing to unpack .../14-libstdc++-9-dev\_9.3.0-17ubuntu1~20.04\_amd64.deb ...

Unpacking libstdc++-9-dev:amd64 (9.3.0-17ubuntu1~20.04) ...

Selecting previously unselected package g++-9.

Preparing to unpack .../15-g++-9\_9.3.0-17ubuntu1~20.04\_amd64.deb ...

Unpacking g++-9 (9.3.0-17ubuntu1~20.04) ...

Selecting previously unselected package g++.

Preparing to unpack .../16-g++\_4%3a9.3.0-1ubuntu2\_amd64.deb ...

Unpacking g++ (4:9.3.0-1ubuntu2) ...

Selecting previously unselected package dpkg-dev.

Preparing to unpack .../17-dpkg-dev\_1.19.7ubuntu3\_all.deb ...

Unpacking dpkg-dev (1.19.7ubuntu3) ...

Selecting previously unselected package build-essential.

Preparing to unpack .../18-build-essential\_12.8ubuntu1.1\_amd64.deb ...

Unpacking build-essential (12.8ubuntu1.1) ...

Selecting previously unselected package libfakeroot:amd64.

Preparing to unpack .../19-libfakeroot\_1.24-1\_amd64.deb ...

Unpacking libfakeroot:amd64 (1.24-1) ...

Selecting previously unselected package fakeroot.

Preparing to unpack .../20-fakeroot\_1.24-1\_amd64.deb ...

Unpacking fakeroot (1.24-1) ...

Selecting previously unselected package libalgorithm-diff-perl.

Preparing to unpack .../21-libalgorithm-diff-perl\_1.19.03-2\_all.deb ...

Unpacking libalgorithm-diff-perl (1.19.03-2) ...

Selecting previously unselected package libalgorithm-diff-xs-perl.

Preparing to unpack .../22-libalgorithm-diff-xs-perl\_0.04-6\_amd64.deb ...

Unpacking libalgorithm-diff-xs-perl (0.04-6) ...

Selecting previously unselected package libalgorithm-merge-perl.

Preparing to unpack .../23-libalgorithm-merge-perl\_0.08-3\_all.deb ...

Unpacking libalgorithm-merge-perl (0.08-3) ...

Selecting previously unselected package manpages-dev.

Preparing to unpack .../24-manpages-dev\_5.05-1\_all.deb ...

Unpacking manpages-dev (5.05-1) ...

Setting up manpages-dev (5.05-1) ...

Setting up libalgorithm-diff-perl (1.19.03-2) ...

Setting up linux-libc-dev:amd64 (5.4.0-72.80) ...

Setting up libfakeroot:amd64 (1.24-1) ...

Setting up dpkg-dev (1.19.7ubuntu3) ...

Setting up fakeroot (1.24-1) ...

update-alternatives: using /usr/bin/fakeroot-sysv to provide /usr/bin/fakeroot (fakeroot) in auto mode

Setting up libasan5:amd64 (9.3.0-17ubuntu1~20.04) ...

Setting up libquadmath0:amd64 (10.2.0-5ubuntu1~20.04) ...

Setting up libatomic1:amd64 (10.2.0-5ubuntu1~20.04) ...

Setting up libubsan1:amd64 (10.2.0-5ubuntu1~20.04) ...

Setting up libcrypt-dev:amd64 (1:4.4.10-10ubuntu4) ...

Setting up libc-dev-bin (2.31-0ubuntu9.2) ...

Setting up libalgorithm-diff-xs-perl (0.04-6) ...

Setting up liblsan0:amd64 (10.2.0-5ubuntu1~20.04) ...

Setting up libitm1:amd64 (10.2.0-5ubuntu1~20.04) ...

Setting up libalgorithm-merge-perl (0.08-3) ...

Setting up libtsan0:amd64 (10.2.0-5ubuntu1~20.04) ...

Setting up libgcc-9-dev:amd64 (9.3.0-17ubuntu1~20.04) ...

Setting up libc6-dev:amd64 (2.31-0ubuntu9.2) ...

Setting up gcc-9 (9.3.0-17ubuntu1~20.04) ...

Setting up libstdc++-9-dev:amd64 (9.3.0-17ubuntu1~20.04) ...

Setting up gcc (4:9.3.0-1ubuntu2) ...

Setting up g++-9 (9.3.0-17ubuntu1~20.04) ...

Setting up g++ (4:9.3.0-1ubuntu2) ...

update-alternatives: using /usr/bin/g++ to provide /usr/bin/c++ (c++) in auto mode

Setting up build-essential (12.8ubuntu1.1) ...

Processing triggers for man-db (2.9.1-1) ...

Processing triggers for libc-bin (2.31-0ubuntu9.2) ...

shaz@ubuntu:~$ ls

Desktop Documents Downloads Music Pictures Public Templates Videos

shaz@ubuntu:~$ cd Downloads/

shaz@ubuntu:~/Downloads$ ls

oyente-master pycharm-2021.1 z3-z3-4.5.0

shaz@ubuntu:~/Downloads$ cd z3-z3-4.5.0/

shaz@ubuntu:~/Downloads/z3-z3-4.5.0$ ls

build CMakeLists.txt configure contrib doc examples LICENSE.txt README-CMake.md README.md RELEASE\_NOTES scripts src

shaz@ubuntu:~/Downloads/z3-z3-4.5.0$ python scripts/mk\_make.py -python

opt = -p, arg = ython

New component: 'util'

New component: 'polynomial'

New component: 'sat'

New component: 'nlsat'

New component: 'hilbert'

New component: 'simplex'

New component: 'automata'

New component: 'interval'

New component: 'realclosure'

New component: 'subpaving'

New component: 'ast'

New component: 'rewriter'

New component: 'normal\_forms'

New component: 'model'

New component: 'tactic'

New component: 'substitution'

New component: 'parser\_util'

New component: 'grobner'

New component: 'euclid'

New component: 'core\_tactics'

New component: 'sat\_tactic'

New component: 'arith\_tactics'

New component: 'nlsat\_tactic'

New component: 'subpaving\_tactic'

New component: 'aig\_tactic'

New component: 'solver'

New component: 'ackermannization'

New component: 'interp'

New component: 'cmd\_context'

New component: 'extra\_cmds'

New component: 'smt2parser'

New component: 'proof\_checker'

New component: 'simplifier'

New component: 'fpa'

New component: 'macros'

New component: 'pattern'

New component: 'bit\_blaster'

New component: 'smt\_params'

New component: 'proto\_model'

New component: 'smt'

New component: 'bv\_tactics'

New component: 'fuzzing'

New component: 'smt\_tactic'

New component: 'sls\_tactic'

New component: 'qe'

New component: 'duality'

New component: 'muz'

New component: 'dataflow'

New component: 'transforms'

New component: 'rel'

New component: 'pdr'

New component: 'clp'

New component: 'tab'

New component: 'bmc'

New component: 'ddnf'

New component: 'duality\_intf'

New component: 'fp'

New component: 'nlsat\_smt\_tactic'

New component: 'ufbv\_tactic'

New component: 'sat\_solver'

New component: 'smtlogic\_tactics'

New component: 'fpa\_tactics'

New component: 'portfolio'

New component: 'smtparser'

New component: 'opt'

New component: 'api'

New component: 'shell'

New component: 'test'

New component: 'api\_dll'

New component: 'dotnet'

New component: 'java'

New component: 'ml'

New component: 'cpp'

Python bindings directory was detected.

New component: 'python'

New component: 'python\_install'

New component: 'cpp\_example'

New component: 'z3\_tptp'

New component: 'c\_example'

New component: 'maxsat'

New component: 'dotnet\_example'

New component: 'java\_example'

New component: 'ml\_example'

New component: 'py\_example'

Generating src/util/version.h from src/util/version.h.in

Generated 'src/util/version.h'

Generating src/api/dotnet/Properties/AssemblyInfo.cs from src/api/dotnet/Properties/AssemblyInfo.cs.in

Generated 'src/opt/opt\_params.hpp'

Generated 'src/solver/combined\_solver\_params.hpp'

Generated 'src/nlsat/nlsat\_params.hpp'

Generated 'src/sat/sat\_params.hpp'

Generated 'src/sat/sat\_asymm\_branch\_params.hpp'

Generated 'src/sat/sat\_simplifier\_params.hpp'

Generated 'src/sat/sat\_scc\_params.hpp'

Generated 'src/ast/pp\_params.hpp'

Generated 'src/ast/simplifier/bv\_simplifier\_params\_helper.hpp'

Generated 'src/ast/simplifier/array\_simplifier\_params\_helper.hpp'

Generated 'src/ast/simplifier/arith\_simplifier\_params\_helper.hpp'

Generated 'src/ast/normal\_forms/nnf\_params.hpp'

Generated 'src/ast/pattern/pattern\_inference\_params\_helper.hpp'

Generated 'src/ast/fpa/fpa2bv\_rewriter\_params.hpp'

Generated 'src/ast/rewriter/array\_rewriter\_params.hpp'

Generated 'src/ast/rewriter/bv\_rewriter\_params.hpp'

Generated 'src/ast/rewriter/fpa\_rewriter\_params.hpp'

Generated 'src/ast/rewriter/rewriter\_params.hpp'

Generated 'src/ast/rewriter/poly\_rewriter\_params.hpp'

Generated 'src/ast/rewriter/arith\_rewriter\_params.hpp'

Generated 'src/ast/rewriter/bool\_rewriter\_params.hpp'

Generated 'src/model/model\_evaluator\_params.hpp'

Generated 'src/model/model\_params.hpp'

Generated 'src/ackermannization/ackermannize\_bv\_tactic\_params.hpp'

Generated 'src/ackermannization/ackermannization\_params.hpp'

Generated 'src/muz/base/fixedpoint\_params.hpp'

Generated 'src/smt/params/smt\_params\_helper.hpp'

Generated 'src/math/polynomial/algebraic\_params.hpp'

Generated 'src/math/realclosure/rcf\_params.hpp'

Generated 'src/interp/interp\_params.hpp'

Generated 'src/tactic/sls/sls\_params.hpp'

Generated 'src/tactic/smtlogics/qfufbv\_tactic\_params.hpp'

Generated 'src/parsers/util/parser\_params.hpp'

Generated 'src/ast/pattern/database.h'

Generated 'src/shell/install\_tactic.cpp'

Generated 'src/test/install\_tactic.cpp'

Generated 'src/api/dll/install\_tactic.cpp'

Generated 'src/shell/mem\_initializer.cpp'

Generated 'src/test/mem\_initializer.cpp'

Generated 'src/api/dll/mem\_initializer.cpp'

Generated 'src/shell/gparams\_register\_modules.cpp'

Generated 'src/test/gparams\_register\_modules.cpp'

Generated 'src/api/dll/gparams\_register\_modules.cpp'

Generated 'src/api/python/z3/z3consts.py

Generated 'src/api/api\_log\_macros.h'

Generated 'src/api/api\_log\_macros.cpp'

Generated 'src/api/api\_commands.cpp'

Generated 'src/api/python/z3/z3core.py'

Listing src/api/python/z3 ...

Compiling src/api/python/z3/\_\_init\_\_.py ...

Compiling src/api/python/z3/z3.py ...

Compiling src/api/python/z3/z3consts.py ...

Compiling src/api/python/z3/z3core.py ...

Compiling src/api/python/z3/z3num.py ...

Compiling src/api/python/z3/z3poly.py ...

Compiling src/api/python/z3/z3printer.py ...

Compiling src/api/python/z3/z3rcf.py ...

Compiling src/api/python/z3/z3types.py ...

Compiling src/api/python/z3/z3util.py ...

Generated python bytecode

Copied 'z3printer.py'

Copied 'z3consts.py'

Copied 'z3poly.py'

Copied 'z3.py'

Copied '\_\_init\_\_.py'

Copied 'z3num.py'

Copied 'z3types.py'

Copied 'z3util.py'

Copied 'z3core.py'

Copied 'z3rcf.py'

Copied 'z3util.pyc'

Copied 'z3poly.pyc'

Copied 'z3core.pyc'

Copied '\_\_init\_\_.pyc'

Copied 'z3.pyc'

Copied 'z3rcf.pyc'

Copied 'z3printer.pyc'

Copied 'z3types.pyc'

Copied 'z3consts.pyc'

Copied 'z3num.pyc'

Testing ar...

Testing g++...

Testing gcc...

Testing floating point support...

Testing OpenMP...

Host platform: Linux

C++ Compiler: g++

C Compiler : gcc

Archive Tool: ar

Arithmetic: internal

OpenMP: True

Prefix: ython

64-bit: True

FP math: SSE2-GCC

Python pkg dir: /usr/lib/python2.7/dist-packages

Python version: 2.7

Writing build/Makefile

Copied Z3Py example 'example.py' to 'build/python'

Copied Z3Py example 'socrates.py' to 'build/python'

Copied Z3Py example 'visitor.py' to 'build/python'

Copied Z3Py example 'all\_interval\_series.py' to 'build/python'

Makefile was successfully generated.

compilation mode: Release

Type 'cd build; make' to build Z3

shaz@ubuntu:~/Downloads/z3-z3-4.5.0$ cd build

shaz@ubuntu:~/Downloads/z3-z3-4.5.0/build$ make

src/shell/install\_tactic.cpp

src/shell/smtlib\_frontend.cpp

src/shell/dimacs\_frontend.cpp

src/shell/gparams\_register\_modules.cpp

src/shell/datalog\_frontend.cpp

src/shell/main.cpp

src/shell/z3\_log\_frontend.cpp

src/shell/opt\_frontend.cpp

src/shell/mem\_initializer.cpp

src/api/api\_opt.cpp

src/api/api\_stats.cpp

src/api/api\_config\_params.cpp

src/api/api\_solver.cpp

src/api/api\_pb.cpp

src/api/api\_parsers.cpp

src/api/api\_ast\_map.cpp

src/api/api\_commands.cpp

src/api/api\_quant.cpp

src/api/z3\_replayer.cpp

src/api/api\_ast.cpp

src/api/api\_params.cpp

src/api/api\_arith.cpp

src/api/api\_log\_macros.cpp

src/api/api\_rcf.cpp

src/api/api\_log.cpp

src/api/api\_fpa.cpp

src/api/api\_datatype.cpp

src/api/api\_algebraic.cpp

src/api/api\_ast\_vector.cpp

src/api/api\_datalog.cpp

src/api/api\_array.cpp

src/api/api\_bv.cpp

src/api/api\_goal.cpp

src/api/api\_tactic.cpp

src/api/api\_polynomial.cpp

src/api/api\_interp.cpp

src/api/api\_context.cpp

src/api/api\_model.cpp

src/api/api\_seq.cpp

src/api/api\_numeral.cpp

src/opt/maxsmt.cpp

src/opt/opt\_cmds.cpp

src/opt/opt\_context.cpp

src/opt/opt\_pareto.cpp

src/opt/wmax.cpp

src/opt/optsmt.cpp

In file included from ../src/opt/optsmt.cpp:35:

../src/smt/theory\_arith.h: In member function ‘bool smt::theory\_arith<Ext>::has\_var(expr\*) const’:

../src/smt/theory\_arith.h:519:58: warning: invalid use of incomplete type ‘class smt::context’

519 | bool has\_var(expr \* v) const { return get\_context().e\_internalized(v) && get\_context().get\_enode(v)->get\_th\_var(get\_id()) != null\_theory\_var; }

| ~~~~~~~~~~~^~

In file included from ../src/opt/opt\_solver.h:29,

from ../src/opt/optsmt.h:22,

from ../src/opt/optsmt.cpp:32:

../src/smt/smt\_kernel.h:43:11: note: forward declaration of ‘class smt::context’

43 | class context;

| ^~~~~~~

In file included from ../src/opt/optsmt.cpp:35:

../src/smt/theory\_arith.h:519:93: warning: invalid use of incomplete type ‘class smt::context’

519 | bool has\_var(expr \* v) const { return get\_context().e\_internalized(v) && get\_context().get\_enode(v)->get\_th\_var(get\_id()) != null\_theory\_var; }

| ~~~~~~~~~~~^~

In file included from ../src/opt/opt\_solver.h:29,

from ../src/opt/optsmt.h:22,

from ../src/opt/optsmt.cpp:32:

../src/smt/smt\_kernel.h:43:11: note: forward declaration of ‘class smt::context’

43 | class context;

| ^~~~~~~

In file included from ../src/opt/optsmt.cpp:35:

../src/smt/theory\_arith.h: In member function ‘smt::theory\_var smt::theory\_arith<Ext>::expr2var(expr\*) const’:

../src/smt/theory\_arith.h:520:107: warning: invalid use of incomplete type ‘class smt::context’

520 | theory\_var expr2var(expr \* v) const { SASSERT(get\_context().e\_internalized(v)); return get\_context().get\_enode(v)->get\_th\_var(get\_id()); }

| ~~~~~~~~~~~^~

In file included from ../src/opt/opt\_solver.h:29,

from ../src/opt/optsmt.h:22,

from ../src/opt/optsmt.cpp:32:

../src/smt/smt\_kernel.h:43:11: note: forward declaration of ‘class smt::context’

43 | class context;

| ^~~~~~~

In file included from ../src/opt/optsmt.cpp:35:

../src/smt/theory\_arith.h: In member function ‘bool smt::theory\_arith<Ext>::is\_free(expr\*) const’:

../src/smt/theory\_arith.h:576:39: warning: invalid use of incomplete type ‘class smt::context’

576 | return is\_free(get\_context().get\_enode(n)->get\_th\_var(get\_id()));

| ~~~~~~~~~~~^~

In file included from ../src/opt/opt\_solver.h:29,

from ../src/opt/optsmt.h:22,

from ../src/opt/optsmt.cpp:32:

../src/smt/smt\_kernel.h:43:11: note: forward declaration of ‘class smt::context’

43 | class context;

| ^~~~~~~

src/opt/pb\_sls.cpp

src/opt/mss.cpp

src/opt/opt\_solver.cpp

src/opt/maxres.cpp

src/parsers/smt/smtparser.cpp

src/parsers/smt/smtlib\_solver.cpp

src/parsers/smt/smtlib.cpp

src/tactic/portfolio/pb2bv\_solver.cpp

src/tactic/portfolio/smt\_strategic\_solver.cpp

src/tactic/portfolio/fd\_solver.cpp

src/tactic/portfolio/enum2bv\_solver.cpp

src/tactic/portfolio/default\_tactic.cpp

src/tactic/portfolio/bounded\_int2bv\_solver.cpp

src/tactic/fpa/qffp\_tactic.cpp

src/tactic/fpa/fpa2bv\_model\_converter.cpp

src/tactic/fpa/fpa2bv\_tactic.cpp

src/tactic/smtlogics/qfuf\_tactic.cpp

src/tactic/smtlogics/qfufbv\_ackr\_model\_converter.cpp

src/tactic/smtlogics/qfidl\_tactic.cpp

src/tactic/smtlogics/qflia\_tactic.cpp

src/tactic/smtlogics/nra\_tactic.cpp

src/tactic/smtlogics/qfbv\_tactic.cpp

src/tactic/smtlogics/qflra\_tactic.cpp

src/tactic/smtlogics/qfaufbv\_tactic.cpp

src/tactic/smtlogics/qfnra\_tactic.cpp

src/tactic/smtlogics/qfnia\_tactic.cpp

src/tactic/smtlogics/quant\_tactics.cpp

src/tactic/smtlogics/qfufnra\_tactic.cpp

src/tactic/smtlogics/qfauflia\_tactic.cpp

src/tactic/smtlogics/qfufbv\_tactic.cpp

src/sat/sat\_solver/inc\_sat\_solver.cpp

src/tactic/ufbv/ufbv\_rewriter\_tactic.cpp

src/tactic/ufbv/ufbv\_rewriter.cpp

src/tactic/ufbv/macro\_finder\_tactic.cpp

src/tactic/ufbv/ufbv\_tactic.cpp

src/tactic/ufbv/quasi\_macros\_tactic.cpp

src/tactic/nlsat\_smt/nl\_purify\_tactic.cpp

src/muz/fp/datalog\_parser.cpp

src/muz/fp/dl\_cmds.cpp

src/muz/fp/horn\_tactic.cpp

src/muz/fp/dl\_register\_engine.cpp

src/muz/duality/duality\_dl\_interface.cpp

src/muz/ddnf/ddnf.cpp

src/muz/bmc/dl\_bmc\_engine.cpp

src/muz/tab/tab\_context.cpp

src/muz/clp/clp\_context.cpp

src/muz/pdr/pdr\_prop\_solver.cpp

src/muz/pdr/pdr\_reachable\_cache.cpp

src/muz/pdr/pdr\_manager.cpp

src/muz/pdr/pdr\_farkas\_learner.cpp

src/muz/pdr/pdr\_util.cpp

src/muz/pdr/pdr\_closure.cpp

src/muz/pdr/pdr\_generalizers.cpp

src/muz/pdr/pdr\_smt\_context\_manager.cpp

src/muz/pdr/pdr\_dl\_interface.cpp

src/muz/pdr/pdr\_sym\_mux.cpp

src/muz/pdr/pdr\_context.cpp

src/muz/rel/doc.cpp

src/muz/rel/dl\_interval\_relation.cpp

src/muz/rel/tbv.cpp

src/muz/rel/dl\_sieve\_relation.cpp

src/muz/rel/aig\_exporter.cpp

src/muz/rel/dl\_bound\_relation.cpp

src/muz/rel/dl\_check\_table.cpp

src/muz/rel/dl\_base.cpp

src/muz/rel/dl\_mk\_similarity\_compressor.cpp

src/muz/rel/dl\_product\_relation.cpp

src/muz/rel/dl\_mk\_simple\_joins.cpp

src/muz/rel/karr\_relation.cpp

src/muz/rel/dl\_finite\_product\_relation.cpp

src/muz/rel/dl\_table\_relation.cpp

src/muz/rel/dl\_relation\_manager.cpp

src/muz/rel/dl\_table.cpp

src/muz/rel/rel\_context.cpp

src/muz/rel/dl\_lazy\_table.cpp

src/muz/rel/dl\_instruction.cpp

src/muz/rel/udoc\_relation.cpp

src/muz/rel/dl\_mk\_explanations.cpp

src/muz/rel/dl\_compiler.cpp

src/muz/rel/dl\_external\_relation.cpp

src/muz/rel/check\_relation.cpp

src/muz/rel/dl\_sparse\_table.cpp

src/muz/transforms/dl\_mk\_bit\_blast.cpp

src/muz/transforms/dl\_mk\_quantifier\_abstraction.cpp

src/muz/transforms/dl\_mk\_coi\_filter.cpp

src/muz/transforms/dl\_mk\_array\_blast.cpp

src/muz/transforms/dl\_mk\_unfold.cpp

src/muz/transforms/dl\_mk\_quantifier\_instantiation.cpp

src/muz/transforms/dl\_mk\_magic\_symbolic.cpp

src/muz/transforms/dl\_mk\_karr\_invariants.cpp

src/muz/transforms/dl\_transforms.cpp

src/muz/transforms/dl\_mk\_filter\_rules.cpp

src/muz/transforms/dl\_mk\_rule\_inliner.cpp

src/muz/transforms/dl\_mk\_magic\_sets.cpp

src/muz/transforms/dl\_mk\_interp\_tail\_simplifier.cpp

src/muz/transforms/dl\_mk\_subsumption\_checker.cpp

src/muz/transforms/dl\_mk\_scale.cpp

src/muz/transforms/dl\_mk\_coalesce.cpp

src/muz/transforms/dl\_mk\_unbound\_compressor.cpp

src/muz/transforms/dl\_mk\_slice.cpp

src/muz/transforms/dl\_mk\_loop\_counter.cpp

src/muz/transforms/dl\_mk\_backwards.cpp

src/muz/transforms/dl\_mk\_separate\_negated\_tails.cpp

src/muz/dataflow/dataflow.cpp

src/muz/base/dl\_rule\_set.cpp

src/muz/base/dl\_boogie\_proof.cpp

src/muz/base/dl\_context.cpp

src/muz/base/hnf.cpp

src/muz/base/dl\_rule\_subsumption\_index.cpp

src/muz/base/dl\_costs.cpp

src/muz/base/rule\_properties.cpp

src/muz/base/proof\_utils.cpp

src/muz/base/dl\_util.cpp

src/muz/base/dl\_rule.cpp

src/muz/base/bind\_variables.cpp

src/muz/base/dl\_rule\_transformer.cpp

src/duality/duality\_solver.cpp

src/duality/duality\_wrapper.cpp

src/duality/duality\_rpfp.cpp

src/duality/duality\_profiling.cpp

src/qe/qe\_mbp.cpp

src/qe/qe\_lite.cpp

src/qe/qe\_arith.cpp

src/qe/qe\_tactic.cpp

src/qe/nlarith\_util.cpp

src/qe/qe\_datatype\_plugin.cpp

src/qe/qe\_dl\_plugin.cpp

src/qe/qe\_arith\_plugin.cpp

src/qe/qe\_bv\_plugin.cpp

src/qe/vsubst\_tactic.cpp

src/qe/qe\_sat\_tactic.cpp

src/qe/qe\_cmd.cpp

src/qe/qe\_bool\_plugin.cpp

src/qe/qe.cpp

src/qe/qsat.cpp

src/qe/qe\_arrays.cpp

src/qe/qe\_datatypes.cpp

src/qe/nlqsat.cpp

src/qe/qe\_array\_plugin.cpp

src/tactic/sls/sls\_tactic.cpp

src/tactic/sls/bvsls\_opt\_engine.cpp

src/tactic/sls/sls\_engine.cpp

src/smt/tactic/ctx\_solver\_simplify\_tactic.cpp

src/smt/tactic/unit\_subsumption\_tactic.cpp

src/smt/tactic/smt\_tactic.cpp

src/tactic/bv/bv\_size\_reduction\_tactic.cpp

src/tactic/bv/bit\_blaster\_model\_converter.cpp

src/tactic/bv/bv\_bound\_chk\_tactic.cpp

src/tactic/bv/bv\_bounds\_tactic.cpp

src/tactic/bv/max\_bv\_sharing\_tactic.cpp

src/tactic/bv/bit\_blaster\_tactic.cpp

src/tactic/bv/elim\_small\_bv\_tactic.cpp

src/tactic/bv/dt2bv\_tactic.cpp

src/tactic/bv/bvarray2uf\_tactic.cpp

src/tactic/bv/bvarray2uf\_rewriter.cpp

src/tactic/bv/bv1\_blaster\_tactic.cpp

src/smt/theory\_arith.cpp

In file included from ../src/smt/theory\_arith\_def.h:22,

from ../src/smt/theory\_arith.cpp:20:

../src/smt/theory\_arith.h: In member function ‘bool smt::theory\_arith<Ext>::has\_var(expr\*) const’:

../src/smt/theory\_arith.h:519:58: warning: invalid use of incomplete type ‘class smt::context’

519 | bool has\_var(expr \* v) const { return get\_context().e\_internalized(v) && get\_context().get\_enode(v)->get\_th\_var(get\_id()) != null\_theory\_var; }

| ~~~~~~~~~~~^~

In file included from ../src/smt/smt\_enode.h:23,

from ../src/smt/smt\_theory.h:22,

from ../src/smt/theory\_arith.h:23,

from ../src/smt/theory\_arith\_def.h:22,

from ../src/smt/theory\_arith.cpp:20:

../src/smt/smt\_types.h:50:11: note: forward declaration of ‘class smt::context’

50 | class context;

| ^~~~~~~

In file included from ../src/smt/theory\_arith\_def.h:22,

from ../src/smt/theory\_arith.cpp:20:

../src/smt/theory\_arith.h:519:93: warning: invalid use of incomplete type ‘class smt::context’

519 | bool has\_var(expr \* v) const { return get\_context().e\_internalized(v) && get\_context().get\_enode(v)->get\_th\_var(get\_id()) != null\_theory\_var; }

| ~~~~~~~~~~~^~

In file included from ../src/smt/smt\_enode.h:23,

from ../src/smt/smt\_theory.h:22,

from ../src/smt/theory\_arith.h:23,

from ../src/smt/theory\_arith\_def.h:22,

from ../src/smt/theory\_arith.cpp:20:

../src/smt/smt\_types.h:50:11: note: forward declaration of ‘class smt::context’

50 | class context;

| ^~~~~~~

In file included from ../src/smt/theory\_arith\_def.h:22,

from ../src/smt/theory\_arith.cpp:20:

../src/smt/theory\_arith.h: In member function ‘smt::theory\_var smt::theory\_arith<Ext>::expr2var(expr\*) const’:

../src/smt/theory\_arith.h:520:107: warning: invalid use of incomplete type ‘class smt::context’

520 | theory\_var expr2var(expr \* v) const { SASSERT(get\_context().e\_internalized(v)); return get\_context().get\_enode(v)->get\_th\_var(get\_id()); }

| ~~~~~~~~~~~^~

In file included from ../src/smt/smt\_enode.h:23,

from ../src/smt/smt\_theory.h:22,

from ../src/smt/theory\_arith.h:23,

from ../src/smt/theory\_arith\_def.h:22,

from ../src/smt/theory\_arith.cpp:20:

../src/smt/smt\_types.h:50:11: note: forward declaration of ‘class smt::context’

50 | class context;

| ^~~~~~~

In file included from ../src/smt/theory\_arith\_def.h:22,

from ../src/smt/theory\_arith.cpp:20:

../src/smt/theory\_arith.h: In member function ‘bool smt::theory\_arith<Ext>::is\_free(expr\*) const’:

../src/smt/theory\_arith.h:576:39: warning: invalid use of incomplete type ‘class smt::context’

576 | return is\_free(get\_context().get\_enode(n)->get\_th\_var(get\_id()));

| ~~~~~~~~~~~^~

In file included from ../src/smt/smt\_enode.h:23,

from ../src/smt/smt\_theory.h:22,

from ../src/smt/theory\_arith.h:23,

from ../src/smt/theory\_arith\_def.h:22,

from ../src/smt/theory\_arith.cpp:20:

../src/smt/smt\_types.h:50:11: note: forward declaration of ‘class smt::context’

50 | class context;

| ^~~~~~~

src/smt/smt\_quick\_checker.cpp

src/smt/smt\_for\_each\_relevant\_expr.cpp

src/smt/smt\_theory.cpp

src/smt/smt\_internalizer.cpp

src/smt/smt\_context.cpp

src/smt/smt\_setup.cpp

src/smt/theory\_array.cpp

src/smt/smt\_model\_checker.cpp

src/smt/smt\_literal.cpp

src/smt/arith\_eq\_adapter.cpp

src/smt/theory\_datatype.cpp

src/smt/smt\_kernel.cpp

src/smt/smt\_almost\_cg\_table.cpp

src/smt/fingerprints.cpp

src/smt/arith\_eq\_solver.cpp

src/smt/theory\_wmaxsat.cpp

src/smt/smt\_quantifier\_stat.cpp

src/smt/theory\_bv.cpp

src/smt/smt\_model\_generator.cpp

src/smt/theory\_dummy.cpp

src/smt/mam.cpp

src/smt/asserted\_formulas.cpp

src/smt/elim\_term\_ite.cpp

src/smt/smt\_statistics.cpp

src/smt/theory\_array\_full.cpp

src/smt/smt\_cg\_table.cpp

src/smt/uses\_theory.cpp

src/smt/cached\_var\_subst.cpp

src/smt/theory\_diff\_logic.cpp

src/smt/smt\_implied\_equalities.cpp

src/smt/theory\_seq.cpp

src/smt/smt\_clause.cpp

src/smt/old\_interval.cpp

src/smt/smt\_solver.cpp

src/smt/smt\_consequences.cpp

src/smt/theory\_array\_base.cpp

src/smt/smt\_context\_pp.cpp

src/smt/smt\_checker.cpp

src/smt/theory\_fpa.cpp

src/smt/theory\_dl.cpp

src/smt/theory\_utvpi.cpp

src/smt/theory\_opt.cpp

src/smt/smt\_farkas\_util.cpp

src/smt/smt\_justification.cpp

src/smt/smt\_value\_sort.cpp

src/smt/smt\_quantifier.cpp

src/smt/smt\_case\_split\_queue.cpp

src/smt/smt\_context\_stat.cpp

src/smt/theory\_dense\_diff\_logic.cpp

src/smt/smt\_conflict\_resolution.cpp

src/smt/smt\_model\_finder.cpp

src/smt/theory\_pb.cpp

src/smt/smt\_relevancy.cpp

src/smt/dyn\_ack.cpp

src/smt/smt\_context\_inv.cpp

src/smt/qi\_queue.cpp

src/smt/smt\_enode.cpp

src/smt/expr\_context\_simplifier.cpp

src/smt/watch\_list.cpp

src/smt/cost\_evaluator.cpp

src/smt/proto\_model/array\_factory.cpp

src/smt/proto\_model/datatype\_factory.cpp

src/smt/proto\_model/numeral\_factory.cpp

src/smt/proto\_model/proto\_model.cpp

src/smt/proto\_model/struct\_factory.cpp

src/smt/proto\_model/value\_factory.cpp

src/smt/params/theory\_arith\_params.cpp

src/smt/params/preprocessor\_params.cpp

src/smt/params/theory\_bv\_params.cpp

src/smt/params/dyn\_ack\_params.cpp

src/smt/params/smt\_params.cpp

src/smt/params/qi\_params.cpp

src/smt/params/theory\_array\_params.cpp

src/smt/params/theory\_pb\_params.cpp

src/ast/rewriter/bit\_blaster/bit\_blaster\_rewriter.cpp

src/ast/rewriter/bit\_blaster/bit\_blaster.cpp

src/ast/pattern/pattern\_inference.cpp

src/ast/pattern/pattern\_inference\_params.cpp

src/ast/pattern/expr\_pattern\_match.cpp

src/ast/macros/macro\_util.cpp

src/ast/macros/macro\_manager.cpp

src/ast/macros/macro\_finder.cpp

src/ast/macros/quasi\_macros.cpp

src/ast/fpa/fpa2bv\_rewriter.cpp

src/ast/fpa/fpa2bv\_converter.cpp

src/ast/fpa/bv2fpa\_converter.cpp

src/ast/simplifier/bv\_simplifier\_plugin.cpp

src/ast/simplifier/basic\_simplifier\_plugin.cpp

src/ast/simplifier/array\_simplifier\_plugin.cpp

src/ast/simplifier/poly\_simplifier\_plugin.cpp

src/ast/simplifier/seq\_simplifier\_plugin.cpp

src/ast/simplifier/array\_simplifier\_params.cpp

src/ast/simplifier/simplifier\_plugin.cpp

src/ast/simplifier/elim\_bounds.cpp

src/ast/simplifier/fpa\_simplifier\_plugin.cpp

src/ast/simplifier/bv\_simplifier\_params.cpp

src/ast/simplifier/bv\_elim.cpp

src/ast/simplifier/arith\_simplifier\_params.cpp

src/ast/simplifier/inj\_axiom.cpp

src/ast/simplifier/datatype\_simplifier\_plugin.cpp

src/ast/simplifier/simplifier.cpp

src/ast/simplifier/pull\_ite\_tree.cpp

src/ast/simplifier/arith\_simplifier\_plugin.cpp

src/ast/simplifier/maximise\_ac\_sharing.cpp

src/ast/simplifier/push\_app\_ite.cpp

src/ast/simplifier/bit2int.cpp

src/ast/simplifier/distribute\_forall.cpp

src/ast/proof\_checker/proof\_checker.cpp

src/parsers/smt2/smt2scanner.cpp

src/parsers/smt2/smt2parser.cpp

src/cmd\_context/extra\_cmds/polynomial\_cmds.cpp

src/cmd\_context/extra\_cmds/subpaving\_cmds.cpp

src/cmd\_context/extra\_cmds/dbg\_cmds.cpp

src/cmd\_context/cmd\_context\_to\_goal.cpp

src/cmd\_context/interpolant\_cmds.cpp

src/cmd\_context/tactic\_cmds.cpp

src/cmd\_context/check\_logic.cpp

src/cmd\_context/simplify\_cmd.cpp

src/cmd\_context/pdecl.cpp

src/cmd\_context/context\_params.cpp

src/cmd\_context/tactic\_manager.cpp

src/cmd\_context/eval\_cmd.cpp

src/cmd\_context/echo\_tactic.cpp

src/cmd\_context/basic\_cmds.cpp

src/cmd\_context/parametric\_cmd.cpp

src/cmd\_context/cmd\_context.cpp

src/cmd\_context/cmd\_util.cpp

src/interp/iz3interp.cpp

src/interp/iz3base.cpp

src/interp/iz3foci.cpp

src/interp/iz3mgr.cpp

src/interp/iz3translate\_direct.cpp

src/interp/iz3checker.cpp

src/interp/iz3profiling.cpp

src/interp/iz3scopes.cpp

src/interp/iz3translate.cpp

src/interp/iz3pp.cpp

src/interp/iz3proof.cpp

src/interp/iz3proof\_itp.cpp

src/ackermannization/ackermannize\_bv\_tactic.cpp

src/ackermannization/lackr.cpp

src/ackermannization/ackr\_model\_converter.cpp

src/ackermannization/ackermannize\_bv\_model\_converter.cpp

src/ackermannization/lackr\_model\_constructor.cpp

src/ackermannization/lackr\_model\_converter\_lazy.cpp

src/ackermannization/ackr\_bound\_probe.cpp

src/ackermannization/ackr\_helper.cpp

src/solver/smt\_logics.cpp

src/solver/tactic2solver.cpp

src/solver/combined\_solver.cpp

src/solver/check\_sat\_result.cpp

src/solver/mus.cpp

src/solver/solver\_na2as.cpp

src/solver/solver2tactic.cpp

src/solver/solver.cpp

src/tactic/aig/aig.cpp

src/tactic/aig/aig\_tactic.cpp

src/math/subpaving/tactic/subpaving\_tactic.cpp

src/math/subpaving/tactic/expr2subpaving.cpp

src/nlsat/tactic/goal2nlsat.cpp

src/nlsat/tactic/qfnra\_nlsat\_tactic.cpp

src/nlsat/tactic/nlsat\_tactic.cpp

src/tactic/arith/probe\_arith.cpp

src/tactic/arith/factor\_tactic.cpp

src/tactic/arith/bound\_manager.cpp

src/tactic/arith/lia2pb\_tactic.cpp

src/tactic/arith/pb2bv\_tactic.cpp

src/tactic/arith/arith\_bounds\_tactic.cpp

src/tactic/arith/card2bv\_tactic.cpp

src/tactic/arith/pb2bv\_model\_converter.cpp

src/tactic/arith/add\_bounds\_tactic.cpp

src/tactic/arith/diff\_neq\_tactic.cpp

src/tactic/arith/purify\_arith\_tactic.cpp

src/tactic/arith/bound\_propagator.cpp

src/tactic/arith/bv2real\_rewriter.cpp

src/tactic/arith/propagate\_ineqs\_tactic.cpp

src/tactic/arith/lia2card\_tactic.cpp

src/tactic/arith/eq2bv\_tactic.cpp

src/tactic/arith/recover\_01\_tactic.cpp

src/tactic/arith/normalize\_bounds\_tactic.cpp

src/tactic/arith/fm\_tactic.cpp

src/tactic/arith/elim01\_tactic.cpp

src/tactic/arith/linear\_equation.cpp

src/tactic/arith/bv2int\_rewriter.cpp

src/tactic/arith/fix\_dl\_var\_tactic.cpp

src/tactic/arith/degree\_shift\_tactic.cpp

src/tactic/arith/nla2bv\_tactic.cpp

src/sat/tactic/atom2bool\_var.cpp

src/sat/tactic/goal2sat.cpp

src/sat/tactic/sat\_tactic.cpp

src/tactic/core/propagate\_values\_tactic.cpp

src/tactic/core/elim\_term\_ite\_tactic.cpp

src/tactic/core/blast\_term\_ite\_tactic.cpp

src/tactic/core/simplify\_tactic.cpp

src/tactic/core/distribute\_forall\_tactic.cpp

src/tactic/core/der\_tactic.cpp

src/tactic/core/pb\_preprocess\_tactic.cpp

src/tactic/core/split\_clause\_tactic.cpp

src/tactic/core/reduce\_args\_tactic.cpp

src/tactic/core/solve\_eqs\_tactic.cpp

src/tactic/core/occf\_tactic.cpp

src/tactic/core/elim\_uncnstr\_tactic.cpp

src/tactic/core/ctx\_simplify\_tactic.cpp

src/tactic/core/tseitin\_cnf\_tactic.cpp

src/tactic/core/cofactor\_term\_ite\_tactic.cpp

src/tactic/core/nnf\_tactic.cpp

src/tactic/core/collect\_occs.cpp

src/tactic/core/symmetry\_reduce\_tactic.cpp

src/tactic/core/cofactor\_elim\_term\_ite.cpp

src/tactic/core/collect\_statistics\_tactic.cpp

src/math/euclid/euclidean\_solver.cpp

src/math/grobner/grobner.cpp

src/parsers/util/cost\_parser.cpp

src/parsers/util/simple\_parser.cpp

src/parsers/util/scanner.cpp

src/parsers/util/pattern\_validation.cpp

src/ast/substitution/substitution.cpp

src/ast/substitution/unifier.cpp

src/ast/substitution/matcher.cpp

src/ast/substitution/substitution\_tree.cpp

src/tactic/goal\_shared\_occs.cpp

src/tactic/tactical.cpp

src/tactic/horn\_subsume\_model\_converter.cpp

src/tactic/filter\_model\_converter.cpp

src/tactic/goal\_util.cpp

src/tactic/goal\_num\_occurs.cpp

src/tactic/goal.cpp

src/tactic/proof\_converter.cpp

src/tactic/tactic.cpp

src/tactic/model\_converter.cpp

src/tactic/probe.cpp

src/tactic/extension\_model\_converter.cpp

src/tactic/equiv\_proof\_converter.cpp

src/tactic/replace\_proof\_converter.cpp

src/model/func\_interp.cpp

src/model/model\_implicant.cpp

src/model/model\_smt2\_pp.cpp

src/model/model2expr.cpp

src/model/model.cpp

src/model/model\_core.cpp

src/model/model\_evaluator.cpp

src/model/model\_pp.cpp

src/model/model\_v2\_pp.cpp

src/ast/normal\_forms/nnf.cpp

src/ast/normal\_forms/defined\_names.cpp

src/ast/normal\_forms/pull\_quant.cpp

src/ast/normal\_forms/name\_exprs.cpp

src/ast/rewriter/rewriter.cpp

src/ast/rewriter/seq\_rewriter.cpp

src/ast/rewriter/label\_rewriter.cpp

src/ast/rewriter/der.cpp

src/ast/rewriter/mk\_simplified\_app.cpp

src/ast/rewriter/factor\_rewriter.cpp

src/ast/rewriter/fpa\_rewriter.cpp

src/ast/rewriter/array\_rewriter.cpp

src/ast/rewriter/pb\_rewriter.cpp

src/ast/rewriter/pb2bv\_rewriter.cpp

src/ast/rewriter/bv\_rewriter.cpp

src/ast/rewriter/datatype\_rewriter.cpp

src/ast/rewriter/expr\_safe\_replace.cpp

src/ast/rewriter/var\_subst.cpp

src/ast/rewriter/ast\_counter.cpp

src/ast/rewriter/mk\_extract\_proc.cpp

src/ast/rewriter/arith\_rewriter.cpp

src/ast/rewriter/bv\_bounds.cpp

src/ast/rewriter/bool\_rewriter.cpp

src/ast/rewriter/bv\_trailing.cpp

src/ast/rewriter/enum2bv\_rewriter.cpp

src/ast/rewriter/quant\_hoist.cpp

src/ast/rewriter/dl\_rewriter.cpp

src/ast/rewriter/expr\_replacer.cpp

src/ast/rewriter/th\_rewriter.cpp

src/ast/ast\_translation.cpp

src/ast/dl\_decl\_plugin.cpp

src/ast/macro\_substitution.cpp

src/ast/ast\_smt\_pp.cpp

src/ast/num\_occurs.cpp

src/ast/fpa\_decl\_plugin.cpp

src/ast/expr\_functors.cpp

src/ast/expr\_abstract.cpp

src/ast/act\_cache.cpp

src/ast/ast\_lt.cpp

src/ast/pp.cpp

src/ast/for\_each\_ast.cpp

src/ast/used\_vars.cpp

src/ast/format.cpp

src/ast/bv\_decl\_plugin.cpp

src/ast/pb\_decl\_plugin.cpp

src/ast/expr\_substitution.cpp

src/ast/expr\_stat.cpp

src/ast/ast\_printer.cpp

src/ast/decl\_collector.cpp

src/ast/reg\_decl\_plugins.cpp

src/ast/well\_sorted.cpp

src/ast/occurs.cpp

src/ast/static\_features.cpp

src/ast/expr\_map.cpp

src/ast/has\_free\_vars.cpp

src/ast/func\_decl\_dependencies.cpp

src/ast/expr2var.cpp

src/ast/expr2polynomial.cpp

src/ast/arith\_decl\_plugin.cpp

src/ast/ast\_pp\_util.cpp

src/ast/ast\_util.cpp

src/ast/datatype\_decl\_plugin.cpp

src/ast/ast\_smt2\_pp.cpp

src/ast/shared\_occs.cpp

src/ast/ast\_ll\_pp.cpp

src/ast/array\_decl\_plugin.cpp

src/ast/for\_each\_expr.cpp

src/ast/ast.cpp

src/ast/seq\_decl\_plugin.cpp

src/math/subpaving/subpaving\_hwf.cpp

src/math/subpaving/subpaving.cpp

src/math/subpaving/subpaving\_mpq.cpp

src/math/subpaving/subpaving\_mpf.cpp

src/math/subpaving/subpaving\_mpfx.cpp

src/math/subpaving/subpaving\_mpff.cpp

src/math/realclosure/realclosure.cpp

src/math/realclosure/mpz\_matrix.cpp

src/math/interval/interval\_mpq.cpp

src/math/automata/automaton.cpp

src/math/simplex/model\_based\_opt.cpp

src/math/simplex/simplex.cpp

src/math/hilbert/hilbert\_basis.cpp

src/nlsat/nlsat\_types.cpp

src/nlsat/nlsat\_interval\_set.cpp

src/nlsat/nlsat\_evaluator.cpp

src/nlsat/nlsat\_solver.cpp

src/nlsat/nlsat\_explain.cpp

src/nlsat/nlsat\_clause.cpp

src/sat/sat\_bceq.cpp

src/sat/sat\_integrity\_checker.cpp

src/sat/sat\_elim\_eqs.cpp

src/sat/sat\_mus.cpp

src/sat/sat\_simplifier.cpp

src/sat/sat\_clause.cpp

src/sat/sat\_model\_converter.cpp

src/sat/sat\_scc.cpp

src/sat/sat\_sls.cpp

src/sat/sat\_asymm\_branch.cpp

src/sat/sat\_config.cpp

src/sat/sat\_clause\_use\_list.cpp

src/sat/sat\_solver.cpp

src/sat/sat\_clause\_set.cpp

src/sat/sat\_cleaner.cpp

src/sat/sat\_watched.cpp

src/sat/dimacs.cpp

src/sat/sat\_iff3\_finder.cpp

src/sat/sat\_probing.cpp

src/math/polynomial/polynomial\_factorization.cpp

src/math/polynomial/upolynomial\_factorization.cpp

src/math/polynomial/polynomial.cpp

src/math/polynomial/rpolynomial.cpp

src/math/polynomial/upolynomial.cpp

src/math/polynomial/algebraic\_numbers.cpp

src/math/polynomial/polynomial\_cache.cpp

src/math/polynomial/sexpr2upolynomial.cpp

src/util/mpbq.cpp

src/util/lbool.cpp

src/util/debug.cpp

src/util/permutation.cpp

src/util/scoped\_ctrl\_c.cpp

src/util/mpz.cpp

src/util/timeit.cpp

src/util/s\_integer.cpp

src/util/fixed\_bit\_vector.cpp

src/util/env\_params.cpp

src/util/small\_object\_allocator.cpp

src/util/mpq.cpp

src/util/bit\_util.cpp

src/util/util.cpp

src/util/approx\_set.cpp

src/util/mpff.cpp

src/util/page.cpp

src/util/timeout.cpp

src/util/gparams.cpp

src/util/region.cpp

src/util/cmd\_context\_types.cpp

src/util/params.cpp

src/util/hwf.cpp

src/util/trace.cpp

src/util/warning.cpp

src/util/mpfx.cpp

src/util/statistics.cpp

src/util/bit\_vector.cpp

src/util/symbol.cpp

src/util/scoped\_timer.cpp

src/util/mpf.cpp

src/util/z3\_exception.cpp

src/util/mpq\_inf.cpp

src/util/mpn.cpp

src/util/rational.cpp

src/util/stack.cpp

src/util/inf\_int\_rational.cpp

src/util/smt2\_util.cpp

src/util/common\_msgs.cpp

src/util/timer.cpp

src/util/inf\_s\_integer.cpp

src/util/hash.cpp

src/util/prime\_generator.cpp

src/util/rlimit.cpp

src/util/sexpr.cpp

src/util/cooperate.cpp

src/util/inf\_rational.cpp

src/util/memory\_manager.cpp

src/util/approx\_nat.cpp

src/util/luby.cpp

g++ -o z3 shell/install\_tactic.o shell/smtlib\_frontend.o shell/dimacs\_frontend.o shell/gparams\_register\_modules.o shell/datalog\_frontend.o shell/main.o shell/z3\_log\_frontend.o shell/opt\_frontend.o shell/mem\_initializer.o api/api.a opt/opt.a parsers/smt/smtparser.a tactic/portfolio/portfolio.a tactic/fpa/fpa\_tactics.a tactic/smtlogics/smtlogic\_tactics.a sat/sat\_solver/sat\_solver.a tactic/ufbv/ufbv\_tactic.a tactic/nlsat\_smt/nlsat\_smt\_tactic.a muz/fp/fp.a muz/duality/duality\_intf.a muz/ddnf/ddnf.a muz/bmc/bmc.a muz/tab/tab.a muz/clp/clp.a muz/pdr/pdr.a muz/rel/rel.a muz/transforms/transforms.a muz/dataflow/dataflow.a muz/base/muz.a duality/duality.a qe/qe.a tactic/sls/sls\_tactic.a smt/tactic/smt\_tactic.a tactic/bv/bv\_tactics.a smt/smt.a smt/proto\_model/proto\_model.a smt/params/smt\_params.a ast/rewriter/bit\_blaster/bit\_blaster.a ast/pattern/pattern.a ast/macros/macros.a ast/fpa/fpa.a ast/simplifier/simplifier.a ast/proof\_checker/proof\_checker.a parsers/smt2/smt2parser.a cmd\_context/extra\_cmds/extra\_cmds.a cmd\_context/cmd\_context.a interp/interp.a ackermannization/ackermannization.a solver/solver.a tactic/aig/aig\_tactic.a math/subpaving/tactic/subpaving\_tactic.a nlsat/tactic/nlsat\_tactic.a tactic/arith/arith\_tactics.a sat/tactic/sat\_tactic.a tactic/core/core\_tactics.a math/euclid/euclid.a math/grobner/grobner.a parsers/util/parser\_util.a ast/substitution/substitution.a tactic/tactic.a model/model.a ast/normal\_forms/normal\_forms.a ast/rewriter/rewriter.a ast/ast.a math/subpaving/subpaving.a math/realclosure/realclosure.a math/interval/interval.a math/automata/automata.a math/simplex/simplex.a math/hilbert/hilbert.a nlsat/nlsat.a sat/sat.a math/polynomial/polynomial.a util/util.a -lpthread -fopenmp -lrt

src/api/dll/install\_tactic.cpp

src/api/dll/gparams\_register\_modules.cpp

src/api/dll/dll.cpp

src/api/dll/mem\_initializer.cpp

g++ -o libz3.so -shared api/dll/install\_tactic.o api/dll/gparams\_register\_modules.o api/dll/dll.o api/dll/mem\_initializer.o api/api\_opt.o api/api\_stats.o api/api\_config\_params.o api/api\_solver.o api/api\_pb.o api/api\_parsers.o api/api\_ast\_map.o api/api\_commands.o api/api\_quant.o api/z3\_replayer.o api/api\_ast.o api/api\_params.o api/api\_arith.o api/api\_log\_macros.o api/api\_rcf.o api/api\_log.o api/api\_fpa.o api/api\_datatype.o api/api\_algebraic.o api/api\_ast\_vector.o api/api\_datalog.o api/api\_array.o api/api\_bv.o api/api\_goal.o api/api\_tactic.o api/api\_polynomial.o api/api\_interp.o api/api\_context.o api/api\_model.o api/api\_seq.o api/api\_numeral.o opt/opt.a parsers/smt/smtparser.a tactic/portfolio/portfolio.a tactic/fpa/fpa\_tactics.a tactic/smtlogics/smtlogic\_tactics.a sat/sat\_solver/sat\_solver.a tactic/ufbv/ufbv\_tactic.a tactic/nlsat\_smt/nlsat\_smt\_tactic.a muz/fp/fp.a muz/duality/duality\_intf.a muz/ddnf/ddnf.a muz/bmc/bmc.a muz/tab/tab.a muz/clp/clp.a muz/pdr/pdr.a muz/rel/rel.a muz/transforms/transforms.a muz/dataflow/dataflow.a muz/base/muz.a duality/duality.a qe/qe.a tactic/sls/sls\_tactic.a smt/tactic/smt\_tactic.a tactic/bv/bv\_tactics.a smt/smt.a smt/proto\_model/proto\_model.a smt/params/smt\_params.a ast/rewriter/bit\_blaster/bit\_blaster.a ast/pattern/pattern.a ast/macros/macros.a ast/fpa/fpa.a ast/simplifier/simplifier.a ast/proof\_checker/proof\_checker.a parsers/smt2/smt2parser.a cmd\_context/extra\_cmds/extra\_cmds.a cmd\_context/cmd\_context.a interp/interp.a ackermannization/ackermannization.a solver/solver.a tactic/aig/aig\_tactic.a math/subpaving/tactic/subpaving\_tactic.a nlsat/tactic/nlsat\_tactic.a tactic/arith/arith\_tactics.a sat/tactic/sat\_tactic.a tactic/core/core\_tactics.a math/euclid/euclid.a math/grobner/grobner.a parsers/util/parser\_util.a ast/substitution/substitution.a tactic/tactic.a model/model.a ast/normal\_forms/normal\_forms.a ast/rewriter/rewriter.a ast/ast.a math/subpaving/subpaving.a math/realclosure/realclosure.a math/interval/interval.a math/automata/automata.a math/simplex/simplex.a math/hilbert/hilbert.a nlsat/nlsat.a sat/sat.a math/polynomial/polynomial.a util/util.a -fopenmp -lrt

ln -f -s ../libz3.so python

Z3 was successfully built.

Z3Py scripts can already be executed in the 'build/python' directory.

Z3Py scripts stored in arbitrary directories can be executed if the 'build/python' directory is added to the PYTHONPATH environment variable and the 'build' directory is added to the LD\_LIBRARY\_PATH environment variable.

Use the following command to install Z3 at prefix ython.

sudo make install

shaz@ubuntu:~/Downloads/z3-z3-4.5.0/build$ sudo make install

[sudo] password for shaz:

Z3 was successfully installed.

shaz@ubuntu:~/Downloads/z3-z3-4.5.0/build$ cd /

shaz@ubuntu:/$ ls

bin boot cdrom dev etc home lib lib32 lib64 libx32 lost+found media mnt opt proc root run sbin snap srv swapfile sys tmp usr var

shaz@ubuntu:/$ cd home

shaz@ubuntu:/home$ ls

shaz

shaz@ubuntu:/home$ cd shaz

shaz@ubuntu:~$ ls

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shaz@ubuntu:~$ cd Downloads/

shaz@ubuntu:~/Downloads$ ls

oyente-master pycharm-2021.1 z3-z3-4.5.0

shaz@ubuntu:~/Downloads$ cd pycharm-2021.1/

shaz@ubuntu:~/Downloads/pycharm-2021.1$ ls

bin brokenPlugins.db build.txt classpath.txt debug-eggs help icons.db Install-Linux-tar.txt jbr lib license plugins product-info.json

shaz@ubuntu:~/Downloads/pycharm-2021.1$ cd bin

shaz@ubuntu:~/Downloads/pycharm-2021.1/bin$ ls

format.sh fsnotifier fsnotifier64 idea.properties inspect.sh libdbm64.so log.xml ltedit.sh printenv.py pycharm64.vmoptions pycharm.png pycharm.sh pycharm.svg pycharm.vmoptions restart.py

shaz@ubuntu:~/Downloads/pycharm-2021.1/bin$ sh pycharm.sh

2021-04-18 00:15:05,394 [ 1098] WARN - llij.ide.plugins.PluginManager - Resource bundle redefinition for plugin 'com.jetbrains.pycharm.pro.customization'. Old value: messages.ActionsBundle, new value: messages.PyBundle

2021-04-18 00:15:09,890 [ 5594] WARN - nSystem.impl.ActionManagerImpl - keymap "Visual Studio" not found [Plugin: com.intellij]

2021-04-18 00:15:09,912 [ 5616] WARN - nSystem.impl.ActionManagerImpl - keymap "Eclipse" not found [Plugin: com.intellij]

2021-04-18 00:15:09,922 [ 5626] WARN - nSystem.impl.ActionManagerImpl - keymap "NetBeans 6.5" not found [Plugin: com.intellij]

2021-04-18 00:15:09,923 [ 5627] WARN - nSystem.impl.ActionManagerImpl - keymap "Visual Studio" not found [Plugin: com.intellij]

2021-04-18 00:15:10,021 [ 5725] WARN - nSystem.impl.ActionManagerImpl - keymap "Visual Studio" not found [Plugin: HtmlTools]

2021-04-18 00:15:10,307 [ 6011] WARN - nSystem.impl.ActionManagerImpl - keymap "Eclipse" not found [Plugin: org.jetbrains.plugins.github]

2021-04-18 00:15:10,398 [ 6102] WARN - nSystem.impl.ActionManagerImpl - keymap "Eclipse" not found [Plugin: JavaScript]

2021-04-18 00:15:10,398 [ 6102] WARN - nSystem.impl.ActionManagerImpl - keymap "Visual Studio" not found [Plugin: JavaScript]

2021-04-18 00:15:10,597 [ 6301] WARN - nSystem.impl.ActionManagerImpl - keymap "Eclipse" not found [Plugin: Pythonid]

2021-04-18 00:15:10,597 [ 6301] WARN - nSystem.impl.ActionManagerImpl - keymap "NetBeans 6.5" not found [Plugin: Pythonid]

2021-04-18 00:15:10,641 [ 6345] WARN - nSystem.impl.ActionManagerImpl - keymap "Visual Studio" not found [Plugin: Pythonid]

2021-04-18 00:15:10,641 [ 6345] WARN - nSystem.impl.ActionManagerImpl - keymap "Eclipse" not found [Plugin: Pythonid]

^C2021-04-18 00:17:39,342 [ 155046] WARN - pl.local.NativeFileWatcherImpl - Watcher terminated with exit code 130

shaz@ubuntu:~/Downloads/pycharm-2021.1/bin$ cd ..

shaz@ubuntu:~/Downloads/pycharm-2021.1$ cd ..

shaz@ubuntu:~/Downloads$ ls

oyente-master pycharm-2021.1 z3-z3-4.5.0

shaz@ubuntu:~/Downloads$ cd ..

shaz@ubuntu:~$ z3 -h

Command 'z3' not found, but can be installed with:

sudo apt install z3

shaz@ubuntu:~$ sudo apt install z3

Reading package lists... Done

Building dependency tree

Reading state information... Done

The following NEW packages will be installed:

z3

0 upgraded, 1 newly installed, 0 to remove and 136 not upgraded.

Need to get 6,808 kB of archives.

After this operation, 22.7 MB of additional disk space will be used.

Get:1 http://us.archive.ubuntu.com/ubuntu focal/universe amd64 z3 amd64 4.8.7-4build1 [6,808 kB]

Fetched 6,808 kB in 1min 12s (94.8 kB/s)

Selecting previously unselected package z3.

(Reading database ... 190255 files and directories currently installed.)

Preparing to unpack .../z3\_4.8.7-4build1\_amd64.deb ...

Unpacking z3 (4.8.7-4build1) ...

Setting up z3 (4.8.7-4build1) ...

Processing triggers for man-db (2.9.1-1) ...

shaz@ubuntu:~$ z3 --version

Z3 version 4.8.7 - 64 bit

shaz@ubuntu:~$ ls

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shaz@ubuntu:~$ cd Downloads/'

> ^C

shaz@ubuntu:~$ cd Downloads/

shaz@ubuntu:~/Downloads$ ls

oyente-master pycharm-2021.1 z3-z3-4.5.0

shaz@ubuntu:~/Downloads$ cd pycharm-2021.1/bin/

shaz@ubuntu:~/Downloads/pycharm-2021.1/bin$ sh pycharm.sh

2021-04-18 00:21:16,656 [ 1084] WARN - llij.ide.plugins.PluginManager - Resource bundle redefinition for plugin 'com.jetbrains.pycharm.pro.customization'. Old value: messages.ActionsBundle, new value: messages.PyBundle

2021-04-18 00:21:20,799 [ 5227] WARN - nSystem.impl.ActionManagerImpl - keymap "Visual Studio" not found [Plugin: com.intellij]

2021-04-18 00:21:20,818 [ 5246] WARN - nSystem.impl.ActionManagerImpl - keymap "Eclipse" not found [Plugin: com.intellij]

2021-04-18 00:21:20,819 [ 5247] WARN - nSystem.impl.ActionManagerImpl - keymap "NetBeans 6.5" not found [Plugin: com.intellij]

2021-04-18 00:21:20,820 [ 5248] WARN - nSystem.impl.ActionManagerImpl - keymap "Visual Studio" not found [Plugin: com.intellij]

2021-04-18 00:21:20,874 [ 5302] WARN - nSystem.impl.ActionManagerImpl - keymap "Visual Studio" not found [Plugin: HtmlTools]

2021-04-18 00:21:21,070 [ 5498] WARN - nSystem.impl.ActionManagerImpl - keymap "Eclipse" not found [Plugin: org.jetbrains.plugins.github]

2021-04-18 00:21:21,156 [ 5584] WARN - nSystem.impl.ActionManagerImpl - keymap "Eclipse" not found [Plugin: JavaScript]

2021-04-18 00:21:21,158 [ 5586] WARN - nSystem.impl.ActionManagerImpl - keymap "Visual Studio" not found [Plugin: JavaScript]

2021-04-18 00:21:21,413 [ 5841] WARN - nSystem.impl.ActionManagerImpl - keymap "Eclipse" not found [Plugin: Pythonid]

2021-04-18 00:21:21,413 [ 5841] WARN - nSystem.impl.ActionManagerImpl - keymap "NetBeans 6.5" not found [Plugin: Pythonid]

2021-04-18 00:21:21,422 [ 5850] WARN - nSystem.impl.ActionManagerImpl - keymap "Visual Studio" not found [Plugin: Pythonid]

2021-04-18 00:21:21,422 [ 5850] WARN - nSystem.impl.ActionManagerImpl - keymap "Eclipse" not found [Plugin: Pythonid]

2021-04-18 00:25:12,839 [ 237267] WARN - ent.TerminalArrangementManager - Cannot list files in /home/shaz/.config/JetBrains/PyCharm2021.1/terminal

java.nio.file.NoSuchFileException: /home/shaz/.config/JetBrains/PyCharm2021.1/terminal

at java.base/sun.nio.fs.UnixException.translateToIOException(UnixException.java:92)

at java.base/sun.nio.fs.UnixException.rethrowAsIOException(UnixException.java:111)

at java.base/sun.nio.fs.UnixException.rethrowAsIOException(UnixException.java:116)

at java.base/sun.nio.fs.UnixFileSystemProvider.newDirectoryStream(UnixFileSystemProvider.java:432)

at java.base/java.nio.file.Files.newDirectoryStream(Files.java:472)

at java.base/java.nio.file.Files.list(Files.java:3774)

at org.jetbrains.plugins.terminal.arrangement.TerminalCommandHistoryManager.deleteOldHistoryDir(TerminalCommandHistoryManager.java:114)

at org.jetbrains.plugins.terminal.arrangement.TerminalCommandHistoryManager.getCommandHistoryDir(TerminalCommandHistoryManager.java:89)

at org.jetbrains.plugins.terminal.arrangement.TerminalCommandHistoryManager.getOrCreateCommandHistoryFile(TerminalCommandHistoryManager.java:39)

at org.jetbrains.plugins.terminal.arrangement.TerminalArrangementManager.assignCommandHistoryFile(TerminalArrangementManager.java:90)

at org.jetbrains.plugins.terminal.TerminalView.createTerminalContent(TerminalView.java:241)

at org.jetbrains.plugins.terminal.TerminalView.createNewTab(TerminalView.java:203)

at org.jetbrains.plugins.terminal.TerminalView.createNewSession(TerminalView.java:178)

at org.jetbrains.plugins.terminal.TerminalView$2.toolWindowShown(TerminalView.java:125)

at com.intellij.util.messages.impl.MessageBusImpl.invokeMethod(MessageBusImpl.java:674)

at com.intellij.util.messages.impl.MessageBusImpl.invokeListener(MessageBusImpl.java:649)

at com.intellij.util.messages.impl.MessageBusImpl.deliverMessage(MessageBusImpl.java:422)

at com.intellij.util.messages.impl.MessageBusImpl.pumpWaitingBuses(MessageBusImpl.java:397)

at com.intellij.util.messages.impl.MessageBusImpl.pumpMessages(MessageBusImpl.java:379)

at com.intellij.util.messages.impl.MessageBusImpl.access$100(MessageBusImpl.java:33)

at com.intellij.util.messages.impl.MessageBusImpl$MessagePublisher.invoke(MessageBusImpl.java:185)

at com.sun.proxy.$Proxy57.toolWindowShown(Unknown Source)

at com.intellij.openapi.wm.impl.ToolWindowManagerImpl.fireToolWindowShown(ToolWindowManagerImpl.kt:1644)

at com.intellij.openapi.wm.impl.ToolWindowManagerImpl.doShowWindow(ToolWindowManagerImpl.kt:1017)

at com.intellij.openapi.wm.impl.ToolWindowManagerImpl.showToolWindowImpl(ToolWindowManagerImpl.kt:962)

at com.intellij.openapi.wm.impl.ToolWindowManagerImpl.activateToolWindow(ToolWindowManagerImpl.kt:662)

at com.intellij.openapi.wm.impl.ToolWindowManagerImpl.activateToolWindow$default(ToolWindowManagerImpl.kt:640)

at com.intellij.openapi.wm.impl.ToolWindowManagerImpl.activated$intellij\_platform\_ide\_impl(ToolWindowManagerImpl.kt:1979)

at com.intellij.openapi.wm.impl.StripeButton.lambda$new$0(StripeButton.java:67)

at java.desktop/javax.swing.AbstractButton.fireActionPerformed(AbstractButton.java:1967)

at java.desktop/javax.swing.AbstractButton$Handler.actionPerformed(AbstractButton.java:2308)

at java.desktop/javax.swing.DefaultButtonModel.fireActionPerformed(DefaultButtonModel.java:405)

at java.desktop/javax.swing.JToggleButton$ToggleButtonModel.setPressed(JToggleButton.java:401)

at java.desktop/javax.swing.plaf.basic.BasicButtonListener.mouseReleased(BasicButtonListener.java:270)

at java.desktop/java.awt.AWTEventMulticaster.mouseReleased(AWTEventMulticaster.java:297)

at java.desktop/java.awt.AWTEventMulticaster.mouseReleased(AWTEventMulticaster.java:297)

at java.desktop/java.awt.Component.processMouseEvent(Component.java:6652)

at java.desktop/javax.swing.JComponent.processMouseEvent(JComponent.java:3345)

at com.intellij.openapi.wm.impl.StripeButton.processMouseEvent(StripeButton.java:315)

at java.desktop/java.awt.Component.processEvent(Component.java:6417)

at java.desktop/java.awt.Container.processEvent(Container.java:2263)

at java.desktop/java.awt.Component.dispatchEventImpl(Component.java:5027)

at java.desktop/java.awt.Container.dispatchEventImpl(Container.java:2321)

at java.desktop/java.awt.Component.dispatchEvent(Component.java:4859)

at java.desktop/java.awt.LightweightDispatcher.retargetMouseEvent(Container.java:4918)

at java.desktop/java.awt.LightweightDispatcher.processMouseEvent(Container.java:4547)

at java.desktop/java.awt.LightweightDispatcher.dispatchEvent(Container.java:4488)

at java.desktop/java.awt.Container.dispatchEventImpl(Container.java:2307)

at java.desktop/java.awt.Window.dispatchEventImpl(Window.java:2784)

at java.desktop/java.awt.Component.dispatchEvent(Component.java:4859)

at java.desktop/java.awt.EventQueue.dispatchEventImpl(EventQueue.java:778)

at java.desktop/java.awt.EventQueue$4.run(EventQueue.java:727)

at java.desktop/java.awt.EventQueue$4.run(EventQueue.java:721)

at java.base/java.security.AccessController.doPrivileged(Native Method)

at java.base/java.security.ProtectionDomain$JavaSecurityAccessImpl.doIntersectionPrivilege(ProtectionDomain.java:85)

at java.base/java.security.ProtectionDomain$JavaSecurityAccessImpl.doIntersectionPrivilege(ProtectionDomain.java:95)

at java.desktop/java.awt.EventQueue$5.run(EventQueue.java:751)

at java.desktop/java.awt.EventQueue$5.run(EventQueue.java:749)

at java.base/java.security.AccessController.doPrivileged(Native Method)

at java.base/java.security.ProtectionDomain$JavaSecurityAccessImpl.doIntersectionPrivilege(ProtectionDomain.java:85)

at java.desktop/java.awt.EventQueue.dispatchEvent(EventQueue.java:748)

at com.intellij.ide.IdeEventQueue.defaultDispatchEvent(IdeEventQueue.java:969)

at com.intellij.ide.IdeEventQueue.dispatchMouseEvent(IdeEventQueue.java:906)

at com.intellij.ide.IdeEventQueue.\_dispatchEvent(IdeEventQueue.java:836)

at com.intellij.ide.IdeEventQueue.lambda$dispatchEvent$8(IdeEventQueue.java:449)

at com.intellij.openapi.progress.impl.CoreProgressManager.computePrioritized(CoreProgressManager.java:808)

at com.intellij.ide.IdeEventQueue.lambda$dispatchEvent$9(IdeEventQueue.java:448)

at com.intellij.openapi.application.impl.ApplicationImpl.runIntendedWriteActionOnCurrentThread(ApplicationImpl.java:781)

at com.intellij.ide.IdeEventQueue.dispatchEvent(IdeEventQueue.java:502)

at java.desktop/java.awt.EventDispatchThread.pumpOneEventForFilters(EventDispatchThread.java:203)

at java.desktop/java.awt.EventDispatchThread.pumpEventsForFilter(EventDispatchThread.java:124)

at java.desktop/java.awt.EventDispatchThread.pumpEventsForHierarchy(EventDispatchThread.java:113)

at java.desktop/java.awt.EventDispatchThread.pumpEvents(EventDispatchThread.java:109)

at java.desktop/java.awt.EventDispatchThread.pumpEvents(EventDispatchThread.java:101)

at java.desktop/java.awt.EventDispatchThread.run(EventDispatchThread.java:90)

^C2021-04-18 00:25:42,248 [ 266676] WARN - pl.local.NativeFileWatcherImpl - Watcher terminated with exit code 130

shaz@ubuntu:~/Downloads/pycharm-2021.1/bin$ cd ..

shaz@ubuntu:~/Downloads/pycharm-2021.1$ cd ..

shaz@ubuntu:~/Downloads$ cd ..

shaz@ubuntu:~$ python

Python 2.7.18 (default, Mar 8 2021, 13:02:45)

[GCC 9.3.0] on linux2

Type "help", "copyright", "credits" or "license" for more information.

>>> import z3

Traceback (most recent call last):

File "<stdin>", line 1, in <module>

ImportError: No module named z3

>>>

shaz@ubuntu:~$ python

Python 2.7.18 (default, Mar 8 2021, 13:02:45)

[GCC 9.3.0] on linux2

Type "help", "copyright", "credits" or "license" for more information.

>>> import numpy

Traceback (most recent call last):

File "<stdin>", line 1, in <module>

ImportError: No module named numpy

>>>

shaz@ubuntu:~$ pip install numpy

Command 'pip' not found, but there are 18 similar ones.

shaz@ubuntu:~$ pip2 install numpy

Command 'pip2' not found, did you mean:

command 'pip3' from deb python3-pip (20.0.2-5ubuntu1.1)

command 'pipx' from deb pipx (0.12.3.1-2ubuntu1)

command 'nip2' from deb nip2 (8.7.0-1)

Try: sudo apt install <deb name>

shaz@ubuntu:~$ sudo apt install pip

[sudo] password for shaz:

Reading package lists... Done

Building dependency tree

Reading state information... Done

E: Unable to locate package pip

shaz@ubuntu:~$ sudo apt install python3-pip

Reading package lists... Done

Building dependency tree

Reading state information... Done

The following additional packages will be installed:

libexpat1-dev libpython3-dev libpython3.8 libpython3.8-dev libpython3.8-minimal libpython3.8-stdlib python-pip-whl python3-dev python3-distutils python3-setuptools python3-wheel python3.8

python3.8-dev python3.8-minimal zlib1g-dev

Suggested packages:

python-setuptools-doc python3.8-venv python3.8-doc binfmt-support

The following NEW packages will be installed:

libexpat1-dev libpython3-dev libpython3.8-dev python-pip-whl python3-dev python3-distutils python3-pip python3-setuptools python3-wheel python3.8-dev zlib1g-dev

The following packages will be upgraded:

libpython3.8 libpython3.8-minimal libpython3.8-stdlib python3.8 python3.8-minimal

5 upgraded, 11 newly installed, 0 to remove and 131 not upgraded.

Need to get 7,261 kB/13.5 MB of archives.

After this operation, 28.4 MB of additional disk space will be used.

43% [Working]o continue? [Y/n]

Get:1 http://us.archive.ubuntu.com/ubuntu focal/main amd64 libexpat1-dev amd64 2.2.9-1build1 [116 kB]

Get:1 http://us.archive.ubuntu.com/ubuntu focal/main amd64 libexpat1-dev amd64 2.2.9-1build1 [116 kB]

Get:2 http://us.archive.ubuntu.com/ubuntu focal-updates/main amd64 libpython3.8-dev amd64 3.8.5-1~20.04.2 [3,942 kB]

Get:3 http://us.archive.ubuntu.com/ubuntu focal/main amd64 libpython3-dev amd64 3.8.2-0ubuntu2 [7,236 B]

Get:4 http://us.archive.ubuntu.com/ubuntu focal-updates/universe amd64 python-pip-whl all 20.0.2-5ubuntu1.1 [1,799 kB]

Get:5 http://us.archive.ubuntu.com/ubuntu focal-updates/main amd64 zlib1g-dev amd64 1:1.2.11.dfsg-2ubuntu1.2 [155 kB]

Get:6 http://us.archive.ubuntu.com/ubuntu focal-updates/main amd64 python3.8-dev amd64 3.8.5-1~20.04.2 [515 kB]

Get:7 http://us.archive.ubuntu.com/ubuntu focal-updates/main amd64 python3-distutils all 3.8.5-1~20.04.1 [141 kB]

Get:8 http://us.archive.ubuntu.com/ubuntu focal/main amd64 python3-dev amd64 3.8.2-0ubuntu2 [1,212 B]

Get:9 http://us.archive.ubuntu.com/ubuntu focal/main amd64 python3-setuptools all 45.2.0-1 [330 kB]

Get:10 http://us.archive.ubuntu.com/ubuntu focal/universe amd64 python3-wheel all 0.34.2-1 [23.8 kB]

Get:11 http://us.archive.ubuntu.com/ubuntu focal-updates/universe amd64 python3-pip all 20.0.2-5ubuntu1.1 [230 kB]

Fetched 7,239 kB in 2min 49s (42.8 kB/s)

(Reading database ... 190261 files and directories currently installed.)

Preparing to unpack .../00-python3.8\_3.8.5-1~20.04.2\_amd64.deb ...

Unpacking python3.8 (3.8.5-1~20.04.2) over (3.8.5-1~20.04) ...

Preparing to unpack .../01-libpython3.8\_3.8.5-1~20.04.2\_amd64.deb ...

Unpacking libpython3.8:amd64 (3.8.5-1~20.04.2) over (3.8.5-1~20.04) ...

Preparing to unpack .../02-libpython3.8-stdlib\_3.8.5-1~20.04.2\_amd64.deb ...

Unpacking libpython3.8-stdlib:amd64 (3.8.5-1~20.04.2) over (3.8.5-1~20.04) ...

Preparing to unpack .../03-python3.8-minimal\_3.8.5-1~20.04.2\_amd64.deb ...

Unpacking python3.8-minimal (3.8.5-1~20.04.2) over (3.8.5-1~20.04) ...

Preparing to unpack .../04-libpython3.8-minimal\_3.8.5-1~20.04.2\_amd64.deb ...

Unpacking libpython3.8-minimal:amd64 (3.8.5-1~20.04.2) over (3.8.5-1~20.04) ...

Selecting previously unselected package libexpat1-dev:amd64.

Preparing to unpack .../05-libexpat1-dev\_2.2.9-1build1\_amd64.deb ...

Unpacking libexpat1-dev:amd64 (2.2.9-1build1) ...

Selecting previously unselected package libpython3.8-dev:amd64.

Preparing to unpack .../06-libpython3.8-dev\_3.8.5-1~20.04.2\_amd64.deb ...

Unpacking libpython3.8-dev:amd64 (3.8.5-1~20.04.2) ...

Selecting previously unselected package libpython3-dev:amd64.

Preparing to unpack .../07-libpython3-dev\_3.8.2-0ubuntu2\_amd64.deb ...

Unpacking libpython3-dev:amd64 (3.8.2-0ubuntu2) ...

Selecting previously unselected package python-pip-whl.

Preparing to unpack .../08-python-pip-whl\_20.0.2-5ubuntu1.1\_all.deb ...

Unpacking python-pip-whl (20.0.2-5ubuntu1.1) ...

Selecting previously unselected package zlib1g-dev:amd64.

Preparing to unpack .../09-zlib1g-dev\_1%3a1.2.11.dfsg-2ubuntu1.2\_amd64.deb ...

Unpacking zlib1g-dev:amd64 (1:1.2.11.dfsg-2ubuntu1.2) ...

Selecting previously unselected package python3.8-dev.

Preparing to unpack .../10-python3.8-dev\_3.8.5-1~20.04.2\_amd64.deb ...

Unpacking python3.8-dev (3.8.5-1~20.04.2) ...

Selecting previously unselected package python3-distutils.

Preparing to unpack .../11-python3-distutils\_3.8.5-1~20.04.1\_all.deb ...

Unpacking python3-distutils (3.8.5-1~20.04.1) ...

Selecting previously unselected package python3-dev.

Preparing to unpack .../12-python3-dev\_3.8.2-0ubuntu2\_amd64.deb ...

Unpacking python3-dev (3.8.2-0ubuntu2) ...

Selecting previously unselected package python3-setuptools.

Preparing to unpack .../13-python3-setuptools\_45.2.0-1\_all.deb ...

Unpacking python3-setuptools (45.2.0-1) ...

Selecting previously unselected package python3-wheel.

Preparing to unpack .../14-python3-wheel\_0.34.2-1\_all.deb ...

Unpacking python3-wheel (0.34.2-1) ...

Selecting previously unselected package python3-pip.

Preparing to unpack .../15-python3-pip\_20.0.2-5ubuntu1.1\_all.deb ...

Unpacking python3-pip (20.0.2-5ubuntu1.1) ...

Setting up python3-distutils (3.8.5-1~20.04.1) ...

Setting up libpython3.8-minimal:amd64 (3.8.5-1~20.04.2) ...

Setting up python3-setuptools (45.2.0-1) ...

Setting up python3-wheel (0.34.2-1) ...

Setting up libexpat1-dev:amd64 (2.2.9-1build1) ...

Setting up zlib1g-dev:amd64 (1:1.2.11.dfsg-2ubuntu1.2) ...

Setting up python3.8-minimal (3.8.5-1~20.04.2) ...

Setting up python-pip-whl (20.0.2-5ubuntu1.1) ...

Setting up libpython3.8-stdlib:amd64 (3.8.5-1~20.04.2) ...

Setting up python3.8 (3.8.5-1~20.04.2) ...

Setting up libpython3.8:amd64 (3.8.5-1~20.04.2) ...

Setting up python3-pip (20.0.2-5ubuntu1.1) ...

Setting up libpython3.8-dev:amd64 (3.8.5-1~20.04.2) ...

Setting up python3.8-dev (3.8.5-1~20.04.2) ...

Setting up libpython3-dev:amd64 (3.8.2-0ubuntu2) ...

Setting up python3-dev (3.8.2-0ubuntu2) ...

Processing triggers for mime-support (3.64ubuntu1) ...

Processing triggers for gnome-menus (3.36.0-1ubuntu1) ...

Processing triggers for libc-bin (2.31-0ubuntu9.2) ...

Processing triggers for man-db (2.9.1-1) ...

Processing triggers for desktop-file-utils (0.24-1ubuntu3) ...

shaz@ubuntu:~$ pip install numpy

Command 'pip' not found, but there are 18 similar ones.

shaz@ubuntu:~$ pip3 install numpy

Collecting numpy

Downloading numpy-1.20.2-cp38-cp38-manylinux2010\_x86\_64.whl (15.4 MB)

|████████████████████████████████| 15.4 MB 6.4 kB/s

Installing collected packages: numpy

WARNING: The scripts f2py, f2py3 and f2py3.8 are installed in '/home/shaz/.local/bin' which is not on PATH.

Consider adding this directory to PATH or, if you prefer to suppress this warning, use --no-warn-script-location.

Successfully installed numpy-1.20.2

shaz@ubuntu:~$ python3

Python 3.8.5 (default, Jan 27 2021, 15:41:15)

[GCC 9.3.0] on linux

Type "help", "copyright", "credits" or "license" for more information.

>>> import numpy

>>> os.path.abspath(numpy.\_\_file\_\_)

Traceback (most recent call last):

File "<stdin>", line 1, in <module>

NameError: name 'os' is not defined

>>> import os

>>>

>>>

>>>

>>>

>>>

>>> os.path.abspath(numpy.\_\_file\_\_)

'/home/shaz/.local/lib/python3.8/site-packages/numpy/\_\_init\_\_.py'

>>> import z3

Traceback (most recent call last):

File "<stdin>", line 1, in <module>

ModuleNotFoundError: No module named 'z3'

>>> exit

Use exit() or Ctrl-D (i.e. EOF) to exit

>>>

shaz@ubuntu:~$ python

Python 2.7.18 (default, Mar 8 2021, 13:02:45)

[GCC 9.3.0] on linux2

Type "help", "copyright", "credits" or "license" for more information.

>>> import numpy

Traceback (most recent call last):

File "<stdin>", line 1, in <module>

ImportError: No module named numpy

>>>

shaz@ubuntu:~$ pip

Command 'pip' not found, but there are 18 similar ones.

shaz@ubuntu:~$ python -v

# installing zipimport hook

import zipimport # builtin

# installed zipimport hook

# /usr/lib/python2.7/site.pyc matches /usr/lib/python2.7/site.py

import site # precompiled from /usr/lib/python2.7/site.pyc

# /usr/lib/python2.7/os.pyc matches /usr/lib/python2.7/os.py

import os # precompiled from /usr/lib/python2.7/os.pyc

import errno # builtin

import posix # builtin

# /usr/lib/python2.7/posixpath.pyc matches /usr/lib/python2.7/posixpath.py

import posixpath # precompiled from /usr/lib/python2.7/posixpath.pyc

# /usr/lib/python2.7/stat.pyc matches /usr/lib/python2.7/stat.py

import stat # precompiled from /usr/lib/python2.7/stat.pyc

# /usr/lib/python2.7/genericpath.pyc matches /usr/lib/python2.7/genericpath.py

import genericpath # precompiled from /usr/lib/python2.7/genericpath.pyc

# /usr/lib/python2.7/warnings.pyc matches /usr/lib/python2.7/warnings.py

import warnings # precompiled from /usr/lib/python2.7/warnings.pyc

# /usr/lib/python2.7/linecache.pyc matches /usr/lib/python2.7/linecache.py

import linecache # precompiled from /usr/lib/python2.7/linecache.pyc

# /usr/lib/python2.7/types.pyc matches /usr/lib/python2.7/types.py

import types # precompiled from /usr/lib/python2.7/types.pyc

# /usr/lib/python2.7/UserDict.pyc matches /usr/lib/python2.7/UserDict.py

import UserDict # precompiled from /usr/lib/python2.7/UserDict.pyc

# /usr/lib/python2.7/\_abcoll.pyc matches /usr/lib/python2.7/\_abcoll.py

import \_abcoll # precompiled from /usr/lib/python2.7/\_abcoll.pyc

# /usr/lib/python2.7/abc.pyc matches /usr/lib/python2.7/abc.py

import abc # precompiled from /usr/lib/python2.7/abc.pyc

# /usr/lib/python2.7/\_weakrefset.pyc matches /usr/lib/python2.7/\_weakrefset.py

import \_weakrefset # precompiled from /usr/lib/python2.7/\_weakrefset.pyc

import \_weakref # builtin

# /usr/lib/python2.7/copy\_reg.pyc matches /usr/lib/python2.7/copy\_reg.py

import copy\_reg # precompiled from /usr/lib/python2.7/copy\_reg.pyc

# /usr/lib/python2.7/traceback.pyc matches /usr/lib/python2.7/traceback.py

import traceback # precompiled from /usr/lib/python2.7/traceback.pyc

# /usr/lib/python2.7/sysconfig.pyc matches /usr/lib/python2.7/sysconfig.py

import sysconfig # precompiled from /usr/lib/python2.7/sysconfig.pyc

# /usr/lib/python2.7/re.pyc matches /usr/lib/python2.7/re.py

import re # precompiled from /usr/lib/python2.7/re.pyc

# /usr/lib/python2.7/sre\_compile.pyc matches /usr/lib/python2.7/sre\_compile.py

import sre\_compile # precompiled from /usr/lib/python2.7/sre\_compile.pyc

import \_sre # builtin

# /usr/lib/python2.7/sre\_parse.pyc matches /usr/lib/python2.7/sre\_parse.py

import sre\_parse # precompiled from /usr/lib/python2.7/sre\_parse.pyc

# /usr/lib/python2.7/sre\_constants.pyc matches /usr/lib/python2.7/sre\_constants.py

import sre\_constants # precompiled from /usr/lib/python2.7/sre\_constants.pyc

import \_locale # builtin

# /usr/lib/python2.7/\_sysconfigdata.pyc matches /usr/lib/python2.7/\_sysconfigdata.py

import \_sysconfigdata # precompiled from /usr/lib/python2.7/\_sysconfigdata.pyc

# /usr/lib/python2.7/plat-x86\_64-linux-gnu/\_sysconfigdata\_nd.pyc matches /usr/lib/python2.7/plat-x86\_64-linux-gnu/\_sysconfigdata\_nd.py

import \_sysconfigdata\_nd # precompiled from /usr/lib/python2.7/plat-x86\_64-linux-gnu/\_sysconfigdata\_nd.pyc

# /usr/lib/python2.7/sitecustomize.pyc matches /usr/lib/python2.7/sitecustomize.py

import sitecustomize # precompiled from /usr/lib/python2.7/sitecustomize.pyc

import encodings # directory /usr/lib/python2.7/encodings

# /usr/lib/python2.7/encodings/\_\_init\_\_.pyc matches /usr/lib/python2.7/encodings/\_\_init\_\_.py

import encodings # precompiled from /usr/lib/python2.7/encodings/\_\_init\_\_.pyc

# /usr/lib/python2.7/codecs.pyc matches /usr/lib/python2.7/codecs.py

import codecs # precompiled from /usr/lib/python2.7/codecs.pyc

import \_codecs # builtin

# /usr/lib/python2.7/encodings/aliases.pyc matches /usr/lib/python2.7/encodings/aliases.py

import encodings.aliases # precompiled from /usr/lib/python2.7/encodings/aliases.pyc

# /usr/lib/python2.7/encodings/utf\_8.pyc matches /usr/lib/python2.7/encodings/utf\_8.py

import encodings.utf\_8 # precompiled from /usr/lib/python2.7/encodings/utf\_8.pyc

Python 2.7.18 (default, Mar 8 2021, 13:02:45)

[GCC 9.3.0] on linux2

Type "help", "copyright", "credits" or "license" for more information.

dlopen("/usr/lib/python2.7/lib-dynload/readline.x86\_64-linux-gnu.so", 2);

import readline # dynamically loaded from /usr/lib/python2.7/lib-dynload/readline.x86\_64-linux-gnu.so

>>> exit()

# clear \_\_builtin\_\_.\_

# clear sys.path

# clear sys.argv

# clear sys.ps1

# clear sys.ps2

# clear sys.exitfunc

# clear sys.exc\_type

# clear sys.exc\_value

# clear sys.exc\_traceback

# clear sys.last\_type

# clear sys.last\_value

# clear sys.last\_traceback

# clear sys.path\_hooks

# clear sys.path\_importer\_cache

# clear sys.meta\_path

# clear sys.flags

# clear sys.float\_info

# restore sys.stdin

# restore sys.stdout

# restore sys.stderr

# cleanup \_\_main\_\_

# cleanup[1] encodings

# cleanup[1] site

# cleanup[1] sysconfig

# cleanup[1] abc

# cleanup[1] \_weakrefset

# cleanup[1] sre\_constants

# cleanup[1] re

# cleanup[1] \_codecs

# cleanup[1] \_warnings

# cleanup[1] zipimport

# cleanup[1] \_sysconfigdata

# cleanup[1] encodings.utf\_8

# cleanup[1] codecs

# cleanup[1] readline

# cleanup[1] \_sysconfigdata\_nd

# cleanup[1] \_locale

# cleanup[1] sitecustomize

# cleanup[1] signal

# cleanup[1] traceback

# cleanup[1] posix

# cleanup[1] encodings.aliases

# cleanup[1] exceptions

# cleanup[1] \_weakref

# cleanup[1] sre\_compile

# cleanup[1] \_sre

# cleanup[1] sre\_parse

# cleanup[2] copy\_reg

# cleanup[2] posixpath

# cleanup[2] errno

# cleanup[2] \_abcoll

# cleanup[2] types

# cleanup[2] genericpath

# cleanup[2] stat

# cleanup[2] warnings

# cleanup[2] UserDict

# cleanup[2] os.path

# cleanup[2] linecache

# cleanup[2] os

# cleanup sys

# cleanup \_\_builtin\_\_

# cleanup ints: 19 unfreed ints

# cleanup floats

shaz@ubuntu:~$ python -V

Python 2.7.18

shaz@ubuntu:~$ sudo python2 get-pip.py

python2: can't open file 'get-pip.py': [Errno 2] No such file or directory

shaz@ubuntu:~$ curl https://bootstrap.pypa.io/pip/2.7/get-pip.py --output get-pip.py

Command 'curl' not found, but can be installed with:

sudo apt install curl

shaz@ubuntu:~$ sudo apt install curl

Reading package lists... Done

Building dependency tree

Reading state information... Done

The following additional packages will be installed:

libcurl4

The following NEW packages will be installed:

curl

The following packages will be upgraded:

libcurl4

1 upgraded, 1 newly installed, 0 to remove and 130 not upgraded.

Need to get 161 kB/395 kB of archives.

After this operation, 411 kB of additional disk space will be used.

Do you want to continue? [Y/n] Y

Get:1 http://us.archive.ubuntu.com/ubuntu focal-updates/main amd64 curl amd64 7.68.0-1ubuntu2.5 [161 kB]

Fetched 161 kB in 2s (71.2 kB/s)

(Reading database ... 190963 files and directories currently installed.)

Preparing to unpack .../libcurl4\_7.68.0-1ubuntu2.5\_amd64.deb ...

Unpacking libcurl4:amd64 (7.68.0-1ubuntu2.5) over (7.68.0-1ubuntu2.4) ...

Selecting previously unselected package curl.

Preparing to unpack .../curl\_7.68.0-1ubuntu2.5\_amd64.deb ...

Unpacking curl (7.68.0-1ubuntu2.5) ...

Setting up libcurl4:amd64 (7.68.0-1ubuntu2.5) ...

Setting up curl (7.68.0-1ubuntu2.5) ...

Processing triggers for man-db (2.9.1-1) ...

Processing triggers for libc-bin (2.31-0ubuntu9.2) ...

shaz@ubuntu:~$ curl https://bootstrap.pypa.io/pip/2.7/get-pip.py --output get-pip.py

% Total % Received % Xferd Average Speed Time Time Time Current

Dload Upload Total Spent Left Speed

100 1863k 100 1863k 0 0 233k 0 0:00:07 0:00:07 --:--:-- 290k

shaz@ubuntu:~$ sudo python2 get-pip.py

DEPRECATION: Python 2.7 reached the end of its life on January 1st, 2020. Please upgrade your Python as Python 2.7 is no longer maintained. pip 21.0 will drop support for Python 2.7 in January 2021. More details about Python 2 support in pip can be found at https://pip.pypa.io/en/latest/development/release-process/#python-2-support pip 21.0 will remove support for this functionality.

Collecting pip<21.0

Downloading pip-20.3.4-py2.py3-none-any.whl (1.5 MB)

|████████████████████████████████| 1.5 MB 145 kB/s

Collecting setuptools<45

Downloading setuptools-44.1.1-py2.py3-none-any.whl (583 kB)

|████████████████████████████████| 583 kB 196 kB/s

Collecting wheel

Downloading wheel-0.36.2-py2.py3-none-any.whl (35 kB)

Installing collected packages: pip, setuptools, wheel

Successfully installed pip-20.3.4 setuptools-44.1.1 wheel-0.36.2

shaz@ubuntu:~$ pip install numpy

DEPRECATION: Python 2.7 reached the end of its life on January 1st, 2020. Please upgrade your Python as Python 2.7 is no longer maintained. pip 21.0 will drop support for Python 2.7 in January 2021. More details about Python 2 support in pip can be found at https://pip.pypa.io/en/latest/development/release-process/#python-2-support pip 21.0 will remove support for this functionality.

Defaulting to user installation because normal site-packages is not writeable

Collecting numpy

Downloading numpy-1.16.6-cp27-cp27mu-manylinux1\_x86\_64.whl (17.0 MB)

|████████████████████████████████| 17.0 MB 76 kB/s

Installing collected packages: numpy

WARNING: The scripts f2py, f2py2 and f2py2.7 are installed in '/home/shaz/.local/bin' which is not on PATH.

Consider adding this directory to PATH or, if you prefer to suppress this warning, use --no-warn-script-location.

Successfully installed numpy-1.16.6

shaz@ubuntu:~$

shaz@ubuntu:~$ python

Python 2.7.18 (default, Mar 8 2021, 13:02:45)

[GCC 9.3.0] on linux2

Type "help", "copyright", "credits" or "license" for more information.

>>> import numpy

>>> import os

>>> os.path.abspath(numpy.\_\_file\_\_)

'/home/shaz/.local/lib/python2.7/site-packages/numpy/\_\_init\_\_.pyc'

>>> exit()

shaz@ubuntu:~$ cd .local/lib/python2.7

shaz@ubuntu:~/.local/lib/python2.7$ cd site-pca

bash: cd: site-pca: No such file or directory

shaz@ubuntu:~/.local/lib/python2.7$ cd site-packages/

shaz@ubuntu:~/.local/lib/python2.7/site-packages$ ls

numpy numpy-1.16.6.dist-info

shaz@ubuntu:~/.local/lib/python2.7/site-packages$ cd ~/Downloads/

shaz@ubuntu:~/Downloads$ ls

oyente-master pycharm-2021.1 z3-z3-4.5.0

shaz@ubuntu:~/Downloads$ cd z3-z3-4.5.0/

shaz@ubuntu:~/Downloads/z3-z3-4.5.0$ ls

build configure doc LICENSE.txt README.md scripts

CMakeLists.txt contrib examples README-CMake.md RELEASE\_NOTES src

shaz@ubuntu:~/Downloads/z3-z3-4.5.0$ python scripts/mk\_make.py --prefix=/home/shaz/ --python --pypkgdir=/home/shaz/.local/lib/python2.7/site-packages

opt = --prefix, arg = /home/shaz/

opt = --python, arg =

opt = --pypkgdir, arg = /home/shaz/.local/lib/python2.7/site-packages

New component: 'util'

New component: 'polynomial'

New component: 'sat'

New component: 'nlsat'

New component: 'hilbert'

New component: 'simplex'

New component: 'automata'

New component: 'interval'

New component: 'realclosure'

New component: 'subpaving'

New component: 'ast'

New component: 'rewriter'

New component: 'normal\_forms'

New component: 'model'

New component: 'tactic'

New component: 'substitution'

New component: 'parser\_util'

New component: 'grobner'

New component: 'euclid'

New component: 'core\_tactics'

New component: 'sat\_tactic'

New component: 'arith\_tactics'

New component: 'nlsat\_tactic'

New component: 'subpaving\_tactic'

New component: 'aig\_tactic'

New component: 'solver'

New component: 'ackermannization'

New component: 'interp'

New component: 'cmd\_context'

New component: 'extra\_cmds'

New component: 'smt2parser'

New component: 'proof\_checker'

New component: 'simplifier'

New component: 'fpa'

New component: 'macros'

New component: 'pattern'

New component: 'bit\_blaster'

New component: 'smt\_params'

New component: 'proto\_model'

New component: 'smt'

New component: 'bv\_tactics'

New component: 'fuzzing'

New component: 'smt\_tactic'

New component: 'sls\_tactic'

New component: 'qe'

New component: 'duality'

New component: 'muz'

New component: 'dataflow'

New component: 'transforms'

New component: 'rel'

New component: 'pdr'

New component: 'clp'

New component: 'tab'

New component: 'bmc'

New component: 'ddnf'

New component: 'duality\_intf'

New component: 'fp'

New component: 'nlsat\_smt\_tactic'

New component: 'ufbv\_tactic'

New component: 'sat\_solver'

New component: 'smtlogic\_tactics'

New component: 'fpa\_tactics'

New component: 'portfolio'

New component: 'smtparser'

New component: 'opt'

New component: 'api'

New component: 'shell'

New component: 'test'

New component: 'api\_dll'

New component: 'dotnet'

New component: 'java'

New component: 'ml'

New component: 'cpp'

Python bindings directory was detected.

New component: 'python'

New component: 'python\_install'

New component: 'cpp\_example'

New component: 'z3\_tptp'

New component: 'c\_example'

New component: 'maxsat'

New component: 'dotnet\_example'

New component: 'java\_example'

New component: 'ml\_example'

New component: 'py\_example'

Generating src/util/version.h from src/util/version.h.in

Generated 'src/util/version.h'

Generating src/api/dotnet/Properties/AssemblyInfo.cs from src/api/dotnet/Properties/AssemblyInfo.cs.in

Generated 'src/opt/opt\_params.hpp'

Generated 'src/solver/combined\_solver\_params.hpp'

Generated 'src/nlsat/nlsat\_params.hpp'

Generated 'src/sat/sat\_params.hpp'

Generated 'src/sat/sat\_asymm\_branch\_params.hpp'

Generated 'src/sat/sat\_simplifier\_params.hpp'

Generated 'src/sat/sat\_scc\_params.hpp'

Generated 'src/ast/pp\_params.hpp'

Generated 'src/ast/simplifier/bv\_simplifier\_params\_helper.hpp'

Generated 'src/ast/simplifier/array\_simplifier\_params\_helper.hpp'

Generated 'src/ast/simplifier/arith\_simplifier\_params\_helper.hpp'

Generated 'src/ast/normal\_forms/nnf\_params.hpp'

Generated 'src/ast/pattern/pattern\_inference\_params\_helper.hpp'

Generated 'src/ast/fpa/fpa2bv\_rewriter\_params.hpp'

Generated 'src/ast/rewriter/array\_rewriter\_params.hpp'

Generated 'src/ast/rewriter/bv\_rewriter\_params.hpp'

Generated 'src/ast/rewriter/fpa\_rewriter\_params.hpp'

Generated 'src/ast/rewriter/rewriter\_params.hpp'

Generated 'src/ast/rewriter/poly\_rewriter\_params.hpp'

Generated 'src/ast/rewriter/arith\_rewriter\_params.hpp'

Generated 'src/ast/rewriter/bool\_rewriter\_params.hpp'

Generated 'src/model/model\_evaluator\_params.hpp'

Generated 'src/model/model\_params.hpp'

Generated 'src/ackermannization/ackermannize\_bv\_tactic\_params.hpp'

Generated 'src/ackermannization/ackermannization\_params.hpp'

Generated 'src/muz/base/fixedpoint\_params.hpp'

Generated 'src/smt/params/smt\_params\_helper.hpp'

Generated 'src/math/polynomial/algebraic\_params.hpp'

Generated 'src/math/realclosure/rcf\_params.hpp'

Generated 'src/interp/interp\_params.hpp'

Generated 'src/tactic/sls/sls\_params.hpp'

Generated 'src/tactic/smtlogics/qfufbv\_tactic\_params.hpp'

Generated 'src/parsers/util/parser\_params.hpp'

Generated 'src/ast/pattern/database.h'

Generated 'src/shell/install\_tactic.cpp'

Generated 'src/test/install\_tactic.cpp'

Generated 'src/api/dll/install\_tactic.cpp'

Generated 'src/shell/mem\_initializer.cpp'

Generated 'src/test/mem\_initializer.cpp'

Generated 'src/api/dll/mem\_initializer.cpp'

Generated 'src/shell/gparams\_register\_modules.cpp'

Generated 'src/test/gparams\_register\_modules.cpp'

Generated 'src/api/dll/gparams\_register\_modules.cpp'

Generated 'src/api/python/z3/z3consts.py

Generated 'src/api/api\_log\_macros.h'

Generated 'src/api/api\_log\_macros.cpp'

Generated 'src/api/api\_commands.cpp'

Generated 'src/api/python/z3/z3core.py'

Listing src/api/python/z3 ...

Compiling src/api/python/z3/\_\_init\_\_.py ...

Compiling src/api/python/z3/z3.py ...

Compiling src/api/python/z3/z3consts.py ...

Compiling src/api/python/z3/z3core.py ...

Compiling src/api/python/z3/z3num.py ...

Compiling src/api/python/z3/z3poly.py ...

Compiling src/api/python/z3/z3printer.py ...

Compiling src/api/python/z3/z3rcf.py ...

Compiling src/api/python/z3/z3types.py ...

Compiling src/api/python/z3/z3util.py ...

Generated python bytecode

Copied 'z3printer.py'

Copied 'z3consts.py'

Copied 'z3poly.py'

Copied 'z3.py'

Copied '\_\_init\_\_.py'

Copied 'z3num.py'

Copied 'z3types.py'

Copied 'z3util.py'

Copied 'z3core.py'

Copied 'z3rcf.py'

Copied 'z3util.pyc'

Copied 'z3poly.pyc'

Copied 'z3core.pyc'

Copied '\_\_init\_\_.pyc'

Copied 'z3.pyc'

Copied 'z3rcf.pyc'

Copied 'z3printer.pyc'

Copied 'z3types.pyc'

Copied 'z3consts.pyc'

Copied 'z3num.pyc'

Testing ar...

Testing g++...

Testing gcc...

Testing floating point support...

Testing OpenMP...

Host platform: Linux

C++ Compiler: g++

C Compiler : gcc

Archive Tool: ar

Arithmetic: internal

OpenMP: True

Prefix: /home/shaz/

64-bit: True

FP math: SSE2-GCC

Python pkg dir: /home/shaz/.local/lib/python2.7/site-packages

Python version: 2.7

Writing build/Makefile

Copied Z3Py example 'example.py' to 'build/python'

Copied Z3Py example 'socrates.py' to 'build/python'

Copied Z3Py example 'visitor.py' to 'build/python'

Copied Z3Py example 'all\_interval\_series.py' to 'build/python'

Makefile was successfully generated.

compilation mode: Release

Type 'cd build; make' to build Z3

shaz@ubuntu:~/Downloads/z3-z3-4.5.0$ cd build; make

src/shell/install\_tactic.cpp

src/shell/gparams\_register\_modules.cpp

src/shell/main.cpp

src/shell/mem\_initializer.cpp

src/api/api\_opt.cpp

src/api/api\_stats.cpp

src/api/api\_config\_params.cpp

src/api/api\_solver.cpp

src/api/api\_pb.cpp

src/api/api\_parsers.cpp

src/api/api\_ast\_map.cpp

src/api/api\_commands.cpp

src/api/api\_quant.cpp

src/api/api\_ast.cpp

src/api/api\_params.cpp

src/api/api\_arith.cpp

src/api/api\_log\_macros.cpp

src/api/api\_rcf.cpp

src/api/api\_log.cpp

src/api/api\_fpa.cpp

src/api/api\_datatype.cpp

src/api/api\_algebraic.cpp

src/api/api\_ast\_vector.cpp

src/api/api\_datalog.cpp

src/api/api\_array.cpp

src/api/api\_bv.cpp

src/api/api\_goal.cpp

src/api/api\_tactic.cpp

src/api/api\_polynomial.cpp

src/api/api\_interp.cpp

src/api/api\_context.cpp

src/api/api\_model.cpp

src/api/api\_seq.cpp

src/api/api\_numeral.cpp

src/opt/opt\_cmds.cpp

src/opt/opt\_context.cpp

src/opt/optsmt.cpp

In file included from ../src/opt/optsmt.cpp:35:

../src/smt/theory\_arith.h: In member function ‘bool smt::theory\_arith<Ext>::has\_var(expr\*) const’:

../src/smt/theory\_arith.h:519:58: warning: invalid use of incomplete type ‘class smt::context’

519 | bool has\_var(expr \* v) const { return get\_context().e\_internalized(v) && get\_context().get\_enode(v)->get\_th\_var(get\_id()) != null\_theory\_var; }

| ~~~~~~~~~~~^~

In file included from ../src/opt/opt\_solver.h:29,

from ../src/opt/optsmt.h:22,

from ../src/opt/optsmt.cpp:32:

../src/smt/smt\_kernel.h:43:11: note: forward declaration of ‘class smt::context’

43 | class context;

| ^~~~~~~

In file included from ../src/opt/optsmt.cpp:35:

../src/smt/theory\_arith.h:519:93: warning: invalid use of incomplete type ‘class smt::context’

519 | const { return get\_context().e\_internalized(v) && get\_context().get\_enode(v)->get\_th\_var(get\_id()) != null\_theory\_var; }

| ~~~~~~~~~~~^~

In file included from ../src/opt/opt\_solver.h:29,

from ../src/opt/optsmt.h:22,

from ../src/opt/optsmt.cpp:32:

../src/smt/smt\_kernel.h:43:11: note: forward declaration of ‘class smt::context’

43 | class context;

| ^~~~~~~

In file included from ../src/opt/optsmt.cpp:35:

../src/smt/theory\_arith.h: In member function ‘smt::theory\_var smt::theory\_arith<Ext>::expr2var(expr\*) const’:

../src/smt/theory\_arith.h:520:107: warning: invalid use of incomplete type ‘class smt::context’

520 | SASSERT(get\_context().e\_internalized(v)); return get\_context().get\_enode(v)->get\_th\_var(get\_id()); }

| ~~~~~~~~~~~^~

In file included from ../src/opt/opt\_solver.h:29,

from ../src/opt/optsmt.h:22,

from ../src/opt/optsmt.cpp:32:

../src/smt/smt\_kernel.h:43:11: note: forward declaration of ‘class smt::context’

43 | class context;

| ^~~~~~~

In file included from ../src/opt/optsmt.cpp:35:

../src/smt/theory\_arith.h: In member function ‘bool smt::theory\_arith<Ext>::is\_free(expr\*) const’:

../src/smt/theory\_arith.h:576:39: warning: invalid use of incomplete type ‘class smt::context’

576 | return is\_free(get\_context().get\_enode(n)->get\_th\_var(get\_id()));

| ~~~~~~~~~~~^~

In file included from ../src/opt/opt\_solver.h:29,

from ../src/opt/optsmt.h:22,

from ../src/opt/optsmt.cpp:32:

../src/smt/smt\_kernel.h:43:11: note: forward declaration of ‘class smt::context’

43 | class context;

| ^~~~~~~

src/opt/opt\_solver.cpp

src/opt/maxres.cpp

src/parsers/smt/smtlib\_solver.cpp

src/tactic/smtlogics/qfufbv\_tactic.cpp

src/muz/fp/dl\_cmds.cpp

src/muz/fp/horn\_tactic.cpp

src/muz/duality/duality\_dl\_interface.cpp

src/muz/tab/tab\_context.cpp

src/muz/pdr/pdr\_util.cpp

src/muz/pdr/pdr\_closure.cpp

src/muz/pdr/pdr\_generalizers.cpp

src/muz/pdr/pdr\_dl\_interface.cpp

src/muz/pdr/pdr\_context.cpp

src/muz/transforms/dl\_mk\_bit\_blast.cpp

src/muz/transforms/dl\_mk\_quantifier\_abstraction.cpp

src/muz/transforms/dl\_transforms.cpp

src/muz/transforms/dl\_mk\_rule\_inliner.cpp

src/muz/transforms/dl\_mk\_scale.cpp

src/muz/base/dl\_context.cpp

src/duality/duality\_solver.cpp

src/duality/duality\_wrapper.cpp

src/duality/duality\_rpfp.cpp

src/duality/duality\_profiling.cpp

src/tactic/sls/sls\_tactic.cpp

src/tactic/sls/bvsls\_opt\_engine.cpp

src/tactic/sls/sls\_engine.cpp

src/smt/tactic/smt\_tactic.cpp

src/tactic/bv/bv\_bound\_chk\_tactic.cpp

src/smt/smt\_kernel.cpp

src/smt/smt\_solver.cpp

src/smt/proto\_model/proto\_model.cpp

src/smt/params/theory\_arith\_params.cpp

src/smt/params/preprocessor\_params.cpp

src/smt/params/theory\_bv\_params.cpp

src/smt/params/dyn\_ack\_params.cpp

src/smt/params/smt\_params.cpp

src/smt/params/qi\_params.cpp

src/smt/params/theory\_array\_params.cpp

src/smt/params/theory\_pb\_params.cpp

src/ast/pattern/pattern\_inference.cpp

src/ast/pattern/pattern\_inference\_params.cpp

src/ast/fpa/fpa2bv\_rewriter.cpp

src/ast/simplifier/array\_simplifier\_params.cpp

src/ast/simplifier/bv\_simplifier\_params.cpp

src/ast/simplifier/arith\_simplifier\_params.cpp

src/parsers/smt2/smt2scanner.cpp

src/parsers/smt2/smt2parser.cpp

src/cmd\_context/extra\_cmds/polynomial\_cmds.cpp

src/cmd\_context/interpolant\_cmds.cpp

src/cmd\_context/basic\_cmds.cpp

src/cmd\_context/cmd\_context.cpp

src/ackermannization/ackermannize\_bv\_tactic.cpp

src/ackermannization/lackr.cpp

src/solver/combined\_solver.cpp

src/model/model\_implicant.cpp

src/model/model\_evaluator.cpp

src/ast/normal\_forms/nnf.cpp

src/ast/rewriter/fpa\_rewriter.cpp

src/ast/rewriter/array\_rewriter.cpp

src/ast/rewriter/bv\_rewriter.cpp

src/ast/rewriter/arith\_rewriter.cpp

src/ast/rewriter/bool\_rewriter.cpp

src/ast/rewriter/th\_rewriter.cpp

src/ast/pp.cpp

src/ast/ast\_smt2\_pp.cpp

src/math/realclosure/realclosure.cpp

src/nlsat/nlsat\_solver.cpp

src/sat/sat\_simplifier.cpp

src/sat/sat\_scc.cpp

src/sat/sat\_asymm\_branch.cpp

src/sat/sat\_config.cpp

src/math/polynomial/algebraic\_numbers.cpp

g++ -o z3 shell/install\_tactic.o shell/smtlib\_frontend.o shell/dimacs\_frontend.o shell/gparams\_register\_modules.o shell/datalog\_frontend.o shell/main.o shell/z3\_log\_frontend.o shell/opt\_frontend.o shell/mem\_initializer.o api/api.a opt/opt.a parsers/smt/smtparser.a tactic/portfolio/portfolio.a tactic/fpa/fpa\_tactics.a tactic/smtlogics/smtlogic\_tactics.a sat/sat\_solver/sat\_solver.a tactic/ufbv/ufbv\_tactic.a tactic/nlsat\_smt/nlsat\_smt\_tactic.a muz/fp/fp.a muz/duality/duality\_intf.a muz/ddnf/ddnf.a muz/bmc/bmc.a muz/tab/tab.a muz/clp/clp.a muz/pdr/pdr.a muz/rel/rel.a muz/transforms/transforms.a muz/dataflow/dataflow.a muz/base/muz.a duality/duality.a qe/qe.a tactic/sls/sls\_tactic.a smt/tactic/smt\_tactic.a tactic/bv/bv\_tactics.a smt/smt.a smt/proto\_model/proto\_model.a smt/params/smt\_params.a ast/rewriter/bit\_blaster/bit\_blaster.a ast/pattern/pattern.a ast/macros/macros.a ast/fpa/fpa.a ast/simplifier/simplifier.a ast/proof\_checker/proof\_checker.a parsers/smt2/smt2parser.a cmd\_context/extra\_cmds/extra\_cmds.a cmd\_context/cmd\_context.a interp/interp.a ackermannization/ackermannization.a solver/solver.a tactic/aig/aig\_tactic.a math/subpaving/tactic/subpaving\_tactic.a nlsat/tactic/nlsat\_tactic.a tactic/arith/arith\_tactics.a sat/tactic/sat\_tactic.a tactic/core/core\_tactics.a math/euclid/euclid.a math/grobner/grobner.a parsers/util/parser\_util.a ast/substitution/substitution.a tactic/tactic.a model/model.a ast/normal\_forms/normal\_forms.a ast/rewriter/rewriter.a ast/ast.a math/subpaving/subpaving.a math/realclosure/realclosure.a math/interval/interval.a math/automata/automata.a math/simplex/simplex.a math/hilbert/hilbert.a nlsat/nlsat.a sat/sat.a math/polynomial/polynomial.a util/util.a -lpthread -fopenmp -lrt

3src/api/dll/install\_tactic.cpp

src/api/dll/gparams\_register\_modules.cpp

src/api/dll/mem\_initializer.cpp

g++ -o libz3.so -shared api/dll/install\_tactic.o api/dll/gparams\_register\_modules.o api/dll/dll.o api/dll/mem\_initializer.o api/api\_opt.o api/api\_stats.o api/api\_config\_params.o api/api\_solver.o api/api\_pb.o api/api\_parsers.o api/api\_ast\_map.o api/api\_commands.o api/api\_quant.o api/z3\_replayer.o api/api\_ast.o api/api\_params.o api/api\_arith.o api/api\_log\_macros.o api/api\_rcf.o api/api\_log.o api/api\_fpa.o api/api\_datatype.o api/api\_algebraic.o api/api\_ast\_vector.o api/api\_datalog.o api/api\_array.o api/api\_bv.o api/api\_goal.o api/api\_tactic.o api/api\_polynomial.o api/api\_interp.o api/api\_context.o api/api\_model.o api/api\_seq.o api/api\_numeral.o opt/opt.a parsers/smt/smtparser.a tactic/portfolio/portfolio.a tactic/fpa/fpa\_tactics.a tactic/smtlogics/smtlogic\_tactics.a sat/sat\_solver/sat\_solver.a tactic/ufbv/ufbv\_tactic.a tactic/nlsat\_smt/nlsat\_smt\_tactic.a muz/fp/fp.a muz/duality/duality\_intf.a muz/ddnf/ddnf.a muz/bmc/bmc.a muz/tab/tab.a muz/clp/clp.a muz/pdr/pdr.a muz/rel/rel.a muz/transforms/transforms.a muz/dataflow/dataflow.a muz/base/muz.a duality/duality.a qe/qe.a tactic/sls/sls\_tactic.a smt/tactic/smt\_tactic.a tactic/bv/bv\_tactics.a smt/smt.a smt/proto\_model/proto\_model.a smt/params/smt\_params.a ast/rewriter/bit\_blaster/bit\_blaster.a ast/pattern/pattern.a ast/macros/macros.a ast/fpa/fpa.a ast/simplifier/simplifier.a ast/proof\_checker/proof\_checker.a parsers/smt2/smt2parser.a cmd\_context/extra\_cmds/extra\_cmds.a cmd\_context/cmd\_context.a interp/interp.a ackermannization/ackermannization.a solver/solver.a tactic/aig/aig\_tactic.a math/subpaving/tactic/subpaving\_tactic.a nlsat/tactic/nlsat\_tactic.a tactic/arith/arith\_tactics.a sat/tactic/sat\_tactic.a tactic/core/core\_tactics.a math/euclid/euclid.a math/grobner/grobner.a parsers/util/parser\_util.a ast/substitution/substitution.a tactic/tactic.a model/model.a ast/normal\_forms/normal\_forms.a ast/rewriter/rewriter.a ast/ast.a math/subpaving/subpaving.a math/realclosure/realclosure.a math/interval/interval.a math/automata/automata.a math/simplex/simplex.a math/hilbert/hilbert.a nlsat/nlsat.a sat/sat.a math/polynomial/polynomial.a util/util.a -fopenmp -lrt

ln -f -s ../libz3.so python

Z3 was successfully built.

Z3Py scripts can already be executed in the 'build/python' directory.

Z3Py scripts stored in arbitrary directories can be executed if the 'build/python' directory is added to the PYTHONPATH environment variable and the 'build' directory is added to the LD\_LIBRARY\_PATH environment variable.

Use the following command to install Z3 at prefix /home/shaz/.

sudo make install

shaz@ubuntu:~/Downloads/z3-z3-4.5.0/build$

shaz@ubuntu:~/Downloads/z3-z3-4.5.0/build$

shaz@ubuntu:~/Downloads/z3-z3-4.5.0/build$

shaz@ubuntu:~/Downloads/z3-z3-4.5.0/build$

shaz@ubuntu:~/Downloads/z3-z3-4.5.0/build$

shaz@ubuntu:~/Downloads/z3-z3-4.5.0/build$

shaz@ubuntu:~/Downloads/z3-z3-4.5.0/build$ sudo make install

[sudo] password for shaz:

Z3Py was installed at /home/shaz/.local/lib/python2.7/site-packages, make sure this directory is in your PYTHONPATH environment variable. @echo Z3 was successfully installed.

shaz@ubuntu:~/Downloads/z3-z3-4.5.0/build$ cd ~

shaz@ubuntu:~$ cd .local/lib/python2.7/site-packages/

shaz@ubuntu:~/.local/lib/python2.7/site-packages$ ls

numpy numpy-1.16.6.dist-info z3

shaz@ubuntu:~/.local/lib/python2.7/site-packages$ cd ~

shaz@ubuntu:~$ python

Python 2.7.18 (default, Mar 8 2021, 13:02:45)

[GCC 9.3.0] on linux2

Type "help", "copyright", "credits" or "license" for more information.

>>> import z3

>>> exit()

shaz@ubuntu:~$ ls

bin Documents get-pip.py lib Pictures Templates

Desktop Downloads include Music Public Videos

shaz@ubuntu:~$ cd Downloads/

shaz@ubuntu:~/Downloads$ ls

oyente-master pycharm-2021.1 z3-z3-4.5.0

shaz@ubuntu:~/Downloads$ cd pycharm-2021.1/bin/

shaz@ubuntu:~/Downloads/pycharm-2021.1/bin$ ls

format.sh inspect.sh printenv.py pycharm.svg

fsnotifier libdbm64.so pycharm64.vmoptions pycharm.vmoptions

fsnotifier64 log.xml pycharm.png restart.py

idea.properties ltedit.sh pycharm.sh

shaz@ubuntu:~/Downloads/pycharm-2021.1/bin$ sh pycharm.sh

2021-04-18 02:15:00,416 [ 2982] WARN - llij.ide.plugins.PluginManager - Resource bundle redefinition for plugin 'com.jetbrains.pycharm.pro.customization'. Old value: messages.ActionsBundle, new value: messages.PyBundle

2021-04-18 02:15:12,107 [ 14673] WARN - nSystem.impl.ActionManagerImpl - keymap "Visual Studio" not found [Plugin: com.intellij]

2021-04-18 02:15:12,146 [ 14712] WARN - nSystem.impl.ActionManagerImpl - keymap "Eclipse" not found [Plugin: com.intellij]

2021-04-18 02:15:12,147 [ 14713] WARN - nSystem.impl.ActionManagerImpl - keymap "NetBeans 6.5" not found [Plugin: com.intellij]

2021-04-18 02:15:12,147 [ 14713] WARN - nSystem.impl.ActionManagerImpl - keymap "Visual Studio" not found [Plugin: com.intellij]

2021-04-18 02:15:12,203 [ 14769] WARN - nSystem.impl.ActionManagerImpl - keymap "Visual Studio" not found [Plugin: HtmlTools]

2021-04-18 02:15:13,089 [ 15655] WARN - nSystem.impl.ActionManagerImpl - keymap "Eclipse" not found [Plugin: org.jetbrains.plugins.github]

2021-04-18 02:15:13,259 [ 15825] WARN - nSystem.impl.ActionManagerImpl - keymap "Eclipse" not found [Plugin: JavaScript]

2021-04-18 02:15:13,259 [ 15825] WARN - nSystem.impl.ActionManagerImpl - keymap "Visual Studio" not found [Plugin: JavaScript]

2021-04-18 02:15:13,515 [ 16081] WARN - nSystem.impl.ActionManagerImpl - keymap "Eclipse" not found [Plugin: Pythonid]

2021-04-18 02:15:13,516 [ 16082] WARN - nSystem.impl.ActionManagerImpl - keymap "NetBeans 6.5" not found [Plugin: Pythonid]

2021-04-18 02:15:13,524 [ 16090] WARN - nSystem.impl.ActionManagerImpl - keymap "Visual Studio" not found [Plugin: Pythonid]

2021-04-18 02:15:13,524 [ 16090] WARN - nSystem.impl.ActionManagerImpl - keymap "Eclipse" not found [Plugin: Pythonid]

2021-04-18 02:15:18,592 [ 21158] WARN - .diagnostic.PerformanceWatcher - UI was frozen for 6713ms, details saved to /home/shaz/.cache/JetBrains/PyCharm2021.1/log/threadDumps-freeze-20210418-021516-PY-211.6693.115-6sec

^C2021-04-18 02:19:03,649 [ 246215] WARN - pl.local.NativeFileWatcherImpl - Watcher terminated with exit code 130

2021-04-18 02:19:03,775 [ 246341] WARN - s.python.debugger.PyStackFrame - Frame not found: 139642226607552 from thread: pid\_3206\_id\_139642239396048

com.jetbrains.python.debugger.PyDebuggerException: Frame not found: 139642226607552 from thread: pid\_3206\_id\_139642239396048

at com.jetbrains.python.debugger.pydev.AbstractCommand.processResponse(AbstractCommand.java:223)

at com.jetbrains.python.debugger.pydev.GetFrameCommand.processResponse(GetFrameCommand.java:39)

at com.jetbrains.python.debugger.pydev.AbstractCommand.execute(AbstractCommand.java:159)

at com.jetbrains.python.debugger.pydev.RemoteDebugger.executeCommand(RemoteDebugger.java:775)

at com.jetbrains.python.debugger.pydev.RemoteDebugger.loadFrame(RemoteDebugger.java:168)

at com.jetbrains.python.debugger.pydev.MultiProcessDebugger.loadFrame(MultiProcessDebugger.java:177)

at com.jetbrains.python.debugger.PyDebugProcess.loadFrame(PyDebugProcess.java:778)

at com.jetbrains.python.debugger.PyStackFrame.lambda$computeChildren$1(PyStackFrame.java:117)

at com.intellij.util.RunnableCallable.call(RunnableCallable.java:20)

at com.intellij.util.RunnableCallable.call(RunnableCallable.java:11)

at com.intellij.openapi.application.impl.ApplicationImpl$1.call(ApplicationImpl.java:265)

at java.base/java.util.concurrent.FutureTask.run(FutureTask.java:264)

at java.base/java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1128)

at java.base/java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:628)

at java.base/java.util.concurrent.Executors$PrivilegedThreadFactory$1$1.run(Executors.java:668)

at java.base/java.util.concurrent.Executors$PrivilegedThreadFactory$1$1.run(Executors.java:665)

at java.base/java.security.AccessController.doPrivileged(Native Method)

at java.base/java.util.concurrent.Executors$PrivilegedThreadFactory$1.run(Executors.java:665)

at java.base/java.lang.Thread.run(Thread.java:834)

2021-04-18 02:19:03,818 [ 246384] ERROR - til.concurrency.QueueProcessor - Index 3 out of bounds for length 3

java.lang.IndexOutOfBoundsException: Index 3 out of bounds for length 3

at java.base/jdk.internal.util.Preconditions.outOfBounds(Preconditions.java:64)

at java.base/jdk.internal.util.Preconditions.outOfBoundsCheckIndex(Preconditions.java:70)

at java.base/jdk.internal.util.Preconditions.checkIndex(Preconditions.java:248)

at java.base/java.util.Objects.checkIndex(Objects.java:372)

at java.base/java.util.ArrayList.get(ArrayList.java:459)

at com.intellij.openapi.editor.impl.view.TextLayoutCache.invalidateLines(TextLayoutCache.java:125)

at com.intellij.openapi.editor.impl.view.TextLayoutCache.invalidateLines(TextLayoutCache.java:111)

at com.intellij.openapi.editor.impl.view.EditorView.invalidateRange(EditorView.java:364)

at com.intellij.openapi.editor.impl.EditorImpl.onHighlighterChanged(EditorImpl.java:623)

at com.intellij.openapi.editor.impl.EditorImpl$1.afterAdded(EditorImpl.java:371)

at com.intellij.openapi.editor.impl.MarkupModelImpl.fireAfterAdded(MarkupModelImpl.java:285)

at com.intellij.openapi.editor.impl.MarkupModelImpl.addRangeHighlighter(MarkupModelImpl.java:170)

at com.intellij.openapi.editor.impl.MarkupModelImpl.addRangeHighlighterAndChangeAttributes(MarkupModelImpl.java:155)

at com.intellij.execution.impl.ConsoleViewImpl.createTokenRangeHighlighter(ConsoleViewImpl.java:824)

at com.intellij.execution.impl.ConsoleViewImpl.flushDeferredText(ConsoleViewImpl.java:718)

at com.intellij.execution.impl.ConsoleViewImpl$FlushRunnable.doRun(ConsoleViewImpl.java:1659)

at com.intellij.execution.impl.ConsoleViewImpl$FlushRunnable.run(ConsoleViewImpl.java:1655)

at com.intellij.util.concurrency.QueueProcessor.runSafely(QueueProcessor.java:238)

at com.intellij.util.Alarm$Request.runSafely(Alarm.java:369)

at com.intellij.util.Alarm$Request.run(Alarm.java:355)

at java.base/java.util.concurrent.Executors$RunnableAdapter.call(Executors.java:515)

at java.base/java.util.concurrent.FutureTask.run(FutureTask.java:264)

at com.intellij.util.concurrency.SchedulingWrapper$MyScheduledFutureTask.run(SchedulingWrapper.java:220)

at com.intellij.openapi.application.TransactionGuardImpl$2.run(TransactionGuardImpl.java:203)

at com.intellij.openapi.application.impl.ApplicationImpl.runIntendedWriteActionOnCurrentThread(ApplicationImpl.java:781)

at com.intellij.openapi.application.impl.ApplicationImpl.lambda$invokeLater$4(ApplicationImpl.java:319)

at com.intellij.openapi.application.impl.FlushQueue.doRun(FlushQueue.java:84)

at com.intellij.openapi.application.impl.FlushQueue.runNextEvent(FlushQueue.java:133)

at com.intellij.openapi.application.impl.FlushQueue.flushNow(FlushQueue.java:46)

at com.intellij.openapi.application.impl.FlushQueue$FlushNow.run(FlushQueue.java:189)

at java.desktop/java.awt.event.InvocationEvent.dispatch(InvocationEvent.java:313)

at java.desktop/java.awt.EventQueue.dispatchEventImpl(EventQueue.java:776)

at java.desktop/java.awt.EventQueue$4.run(EventQueue.java:727)

at java.desktop/java.awt.EventQueue$4.run(EventQueue.java:721)

at java.base/java.security.AccessController.doPrivileged(Native Method)

at java.base/java.security.ProtectionDomain$JavaSecurityAccessImpl.doIntersectionPrivilege(ProtectionDomain.java:85)

at java.desktop/java.awt.EventQueue.dispatchEvent(EventQueue.java:746)

at com.intellij.ide.IdeEventQueue.defaultDispatchEvent(IdeEventQueue.java:969)

at com.intellij.ide.IdeEventQueue.\_dispatchEvent(IdeEventQueue.java:839)

at com.intellij.ide.IdeEventQueue.lambda$dispatchEvent$8(IdeEventQueue.java:449)

at com.intellij.openapi.progress.impl.CoreProgressManager.computePrioritized(CoreProgressManager.java:808)

at com.intellij.ide.IdeEventQueue.lambda$dispatchEvent$9(IdeEventQueue.java:448)

at com.intellij.openapi.application.impl.ApplicationImpl.runIntendedWriteActionOnCurrentThread(ApplicationImpl.java:781)

at com.intellij.ide.IdeEventQueue.dispatchEvent(IdeEventQueue.java:496)

at java.desktop/java.awt.EventDispatchThread.pumpOneEventForFilters(EventDispatchThread.java:203)

at java.desktop/java.awt.EventDispatchThread.pumpEventsForFilter(EventDispatchThread.java:124)

at java.desktop/java.awt.EventDispatchThread.pumpEventsForHierarchy(EventDispatchThread.java:113)

at java.desktop/java.awt.EventDispatchThread.pumpEvents(EventDispatchThread.java:109)

at java.desktop/java.awt.EventDispatchThread.pumpEvents(EventDispatchThread.java:101)

at java.desktop/java.awt.EventDispatchThread.run(EventDispatchThread.java:90)

2021-04-18 02:19:03,836 [ 246402] ERROR - til.concurrency.QueueProcessor - PyCharm 2021.1 Build #PY-211.6693.115

2021-04-18 02:19:03,862 [ 246428] ERROR - til.concurrency.QueueProcessor - JDK: 11.0.10; VM: Dynamic Code Evolution 64-Bit Server VM; Vendor: JetBrains s.r.o.

2021-04-18 02:19:03,862 [ 246428] ERROR - til.concurrency.QueueProcessor - OS: Linux

2021-04-18 02:19:03,863 [ 246429] ERROR - til.concurrency.QueueProcessor - Last Action: EvaluateExpression

2021-04-18 02:19:03,904 [ 246470] ERROR - til.concurrency.QueueProcessor - Index 4 out of bounds for length 3

java.lang.IndexOutOfBoundsException: Index 4 out of bounds for length 3

at java.base/jdk.internal.util.Preconditions.outOfBounds(Preconditions.java:64)

at java.base/jdk.internal.util.Preconditions.outOfBoundsCheckIndex(Preconditions.java:70)

at java.base/jdk.internal.util.Preconditions.checkIndex(Preconditions.java:248)

at java.base/java.util.Objects.checkIndex(Objects.java:372)

at java.base/java.util.ArrayList.get(ArrayList.java:459)

at com.intellij.openapi.editor.impl.view.TextLayoutCache.invalidateLines(TextLayoutCache.java:125)

at com.intellij.openapi.editor.impl.view.TextLayoutCache.invalidateLines(TextLayoutCache.java:111)

at com.intellij.openapi.editor.impl.view.EditorView.invalidateRange(EditorView.java:364)

at com.intellij.openapi.editor.impl.EditorImpl.onHighlighterChanged(EditorImpl.java:623)

at com.intellij.openapi.editor.impl.EditorImpl$1.afterAdded(EditorImpl.java:371)

at com.intellij.openapi.editor.impl.MarkupModelImpl.fireAfterAdded(MarkupModelImpl.java:285)

at com.intellij.openapi.editor.impl.MarkupModelImpl.addRangeHighlighter(MarkupModelImpl.java:170)

at com.intellij.openapi.editor.impl.MarkupModelImpl.addRangeHighlighterAndChangeAttributes(MarkupModelImpl.java:155)

at com.intellij.execution.impl.ConsoleViewImpl.createTokenRangeHighlighter(ConsoleViewImpl.java:824)

at com.intellij.execution.impl.ConsoleViewImpl.flushDeferredText(ConsoleViewImpl.java:718)

at com.intellij.execution.impl.ConsoleViewImpl$FlushRunnable.doRun(ConsoleViewImpl.java:1659)

at com.intellij.execution.impl.ConsoleViewImpl$FlushRunnable.run(ConsoleViewImpl.java:1655)

at com.intellij.util.concurrency.QueueProcessor.runSafely(QueueProcessor.java:238)

at com.intellij.util.Alarm$Request.runSafely(Alarm.java:369)

at com.intellij.util.Alarm$Request.run(Alarm.java:355)

at java.base/java.util.concurrent.Executors$RunnableAdapter.call(Executors.java:515)

at java.base/java.util.concurrent.FutureTask.run(FutureTask.java:264)

at com.intellij.util.concurrency.SchedulingWrapper$MyScheduledFutureTask.run(SchedulingWrapper.java:220)

at com.intellij.openapi.application.TransactionGuardImpl$2.run(TransactionGuardImpl.java:203)

at com.intellij.openapi.application.impl.ApplicationImpl.runIntendedWriteActionOnCurrentThread(ApplicationImpl.java:781)

at com.intellij.openapi.application.impl.ApplicationImpl.lambda$invokeLater$4(ApplicationImpl.java:319)

at com.intellij.openapi.application.impl.FlushQueue.doRun(FlushQueue.java:84)

at com.intellij.openapi.application.impl.FlushQueue.runNextEvent(FlushQueue.java:133)

at com.intellij.openapi.application.impl.FlushQueue.flushNow(FlushQueue.java:46)

at com.intellij.openapi.application.impl.FlushQueue$FlushNow.run(FlushQueue.java:189)

at java.desktop/java.awt.event.InvocationEvent.dispatch(InvocationEvent.java:313)

at java.desktop/java.awt.EventQueue.dispatchEventImpl(EventQueue.java:776)

at java.desktop/java.awt.EventQueue$4.run(EventQueue.java:727)

at java.desktop/java.awt.EventQueue$4.run(EventQueue.java:721)

at java.base/java.security.AccessController.doPrivileged(Native Method)

at java.base/java.security.ProtectionDomain$JavaSecurityAccessImpl.doIntersectionPrivilege(ProtectionDomain.java:85)

at java.desktop/java.awt.EventQueue.dispatchEvent(EventQueue.java:746)

at com.intellij.ide.IdeEventQueue.defaultDispatchEvent(IdeEventQueue.java:969)

at com.intellij.ide.IdeEventQueue.\_dispatchEvent(IdeEventQueue.java:839)

at com.intellij.ide.IdeEventQueue.lambda$dispatchEvent$8(IdeEventQueue.java:449)

at com.intellij.openapi.progress.impl.CoreProgressManager.computePrioritized(CoreProgressManager.java:808)

at com.intellij.ide.IdeEventQueue.lambda$dispatchEvent$9(IdeEventQueue.java:448)

at com.intellij.openapi.application.impl.ApplicationImpl.runIntendedWriteActionOnCurrentThread(ApplicationImpl.java:781)

at com.intellij.ide.IdeEventQueue.dispatchEvent(IdeEventQueue.java:496)

at java.desktop/java.awt.EventDispatchThread.pumpOneEventForFilters(EventDispatchThread.java:203)

at java.desktop/java.awt.EventDispatchThread.pumpEventsForFilter(EventDispatchThread.java:124)

at java.desktop/java.awt.EventDispatchThread.pumpEventsForHierarchy(EventDispatchThread.java:113)

at java.desktop/java.awt.EventDispatchThread.pumpEvents(EventDispatchThread.java:109)

at java.desktop/java.awt.EventDispatchThread.pumpEvents(EventDispatchThread.java:101)

at java.desktop/java.awt.EventDispatchThread.run(EventDispatchThread.java:90)

2021-04-18 02:19:03,916 [ 246482] ERROR - til.concurrency.QueueProcessor - PyCharm 2021.1 Build #PY-211.6693.115

2021-04-18 02:19:03,916 [ 246482] ERROR - til.concurrency.QueueProcessor - JDK: 11.0.10; VM: Dynamic Code Evolution 64-Bit Server VM; Vendor: JetBrains s.r.o.

2021-04-18 02:19:03,916 [ 246482] ERROR - til.concurrency.QueueProcessor - OS: Linux

2021-04-18 02:19:03,916 [ 246482] ERROR - til.concurrency.QueueProcessor - Last Action: EvaluateExpression

shaz@ubuntu:~/Downloads/pycharm-2021.1/bin$ cd ..

shaz@ubuntu:~/Downloads/pycharm-2021.1$ cd ..

shaz@ubuntu:~/Downloads$ ls

oyente-master pycharm-2021.1 z3-z3-4.5.0

shaz@ubuntu:~/Downloads$ cd oyente-master/

shaz@ubuntu:~/Downloads/oyente-master$ ls

get-pip.py oyente-master venv

shaz@ubuntu:~/Downloads/oyente-master$ cd oyente-master/

shaz@ubuntu:~/Downloads/oyente-master/oyente-master$ ls

analysis.py global\_test\_params.py symExec.py utils.py

basicblock.py license.txt test.json vargenerator.py

batch\_run.py misc\_utils test.py venv

Dockerfile opcodes.py tests z3-z3-4.5.0

global\_params.py oyente.py testutils.py

global\_params.pyc README.md unexpected.sol

shaz@ubuntu:~/Downloads/oyente-master/oyente-master$ python oyente.py

Error: Z3 is not available. Please install z3 from https://github.com/Z3Prover/z3.

shaz@ubuntu:~/Downloads/oyente-master/oyente-master$ python

Python 2.7.18 (default, Mar 8 2021, 13:02:45)

[GCC 9.3.0] on linux2

Type "help", "copyright", "credits" or "license" for more information.

>>> import z3

>>> exit()

shaz@ubuntu:~/Downloads/oyente-master/oyente-master$ cd ..

shaz@ubuntu:~/Downloads/oyente-master$ cd ..

shaz@ubuntu:~/Downloads$ cd pycharm-2021.1/bin/

shaz@ubuntu:~/Downloads/pycharm-2021.1/bin$ ./pycharm.sh

2021-04-18 02:22:35,370 [ 1169] WARN - llij.ide.plugins.PluginManager - Resource bundle redefinition for plugin 'com.jetbrains.pycharm.pro.customization'. Old value: messages.ActionsBundle, new value: messages.PyBundle

2021-04-18 02:22:39,779 [ 5578] WARN - nSystem.impl.ActionManagerImpl - keymap "Visual Studio" not found [Plugin: com.intellij]

2021-04-18 02:22:39,818 [ 5617] WARN - nSystem.impl.ActionManagerImpl - keymap "Eclipse" not found [Plugin: com.intellij]

2021-04-18 02:22:39,822 [ 5621] WARN - nSystem.impl.ActionManagerImpl - keymap "NetBeans 6.5" not found [Plugin: com.intellij]

2021-04-18 02:22:39,822 [ 5621] WARN - nSystem.impl.ActionManagerImpl - keymap "Visual Studio" not found [Plugin: com.intellij]

2021-04-18 02:22:39,862 [ 5661] WARN - nSystem.impl.ActionManagerImpl - keymap "Visual Studio" not found [Plugin: HtmlTools]

2021-04-18 02:22:40,188 [ 5987] WARN - nSystem.impl.ActionManagerImpl - keymap "Eclipse" not found [Plugin: org.jetbrains.plugins.github]

2021-04-18 02:22:40,355 [ 6154] WARN - nSystem.impl.ActionManagerImpl - keymap "Eclipse" not found [Plugin: JavaScript]

2021-04-18 02:22:40,355 [ 6154] WARN - nSystem.impl.ActionManagerImpl - keymap "Visual Studio" not found [Plugin: JavaScript]

2021-04-18 02:22:40,548 [ 6347] WARN - nSystem.impl.ActionManagerImpl - keymap "Eclipse" not found [Plugin: Pythonid]

2021-04-18 02:22:40,549 [ 6348] WARN - nSystem.impl.ActionManagerImpl - keymap "NetBeans 6.5" not found [Plugin: Pythonid]

2021-04-18 02:22:40,557 [ 6356] WARN - nSystem.impl.ActionManagerImpl - keymap "Visual Studio" not found [Plugin: Pythonid]

2021-04-18 02:22:40,557 [ 6356] WARN - nSystem.impl.ActionManagerImpl - keymap "Eclipse" not found [Plugin: Pythonid]

2021-04-18 02:27:49,512 [ 315311] WARN - com.intellij.util.xmlb.Binding - no accessors for com.intellij.openapi.updateSettings.impl.pluginsAdvertisement.PluginAdvertiserExtensionsStateService$State

2021-04-18 02:28:44,263 [ 370062] WARN - s.python.debugger.PyStackFrame - Frame not found: 140316484920768 from thread: pid\_3673\_id\_140316497176848

com.jetbrains.python.debugger.PyDebuggerException: Frame not found: 140316484920768 from thread: pid\_3673\_id\_140316497176848

at com.jetbrains.python.debugger.pydev.AbstractCommand.processResponse(AbstractCommand.java:223)

at com.jetbrains.python.debugger.pydev.GetFrameCommand.processResponse(GetFrameCommand.java:39)

at com.jetbrains.python.debugger.pydev.AbstractCommand.execute(AbstractCommand.java:159)

at com.jetbrains.python.debugger.pydev.RemoteDebugger.executeCommand(RemoteDebugger.java:775)

at com.jetbrains.python.debugger.pydev.RemoteDebugger.loadFrame(RemoteDebugger.java:168)

at com.jetbrains.python.debugger.pydev.MultiProcessDebugger.loadFrame(MultiProcessDebugger.java:177)

at com.jetbrains.python.debugger.PyDebugProcess.loadFrame(PyDebugProcess.java:778)

at com.jetbrains.python.debugger.PyStackFrame.lambda$computeChildren$1(PyStackFrame.java:117)

at com.intellij.util.RunnableCallable.call(RunnableCallable.java:20)

at com.intellij.util.RunnableCallable.call(RunnableCallable.java:11)

at com.intellij.openapi.application.impl.ApplicationImpl$1.call(ApplicationImpl.java:265)

at java.base/java.util.concurrent.FutureTask.run(FutureTask.java:264)

at java.base/java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1128)

at java.base/java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:628)

at java.base/java.util.concurrent.Executors$PrivilegedThreadFactory$1$1.run(Executors.java:668)

at java.base/java.util.concurrent.Executors$PrivilegedThreadFactory$1$1.run(Executors.java:665)

at java.base/java.security.AccessController.doPrivileged(Native Method)

at java.base/java.util.concurrent.Executors$PrivilegedThreadFactory$1.run(Executors.java:665)

at java.base/java.lang.Thread.run(Thread.java:834)