Focus only on the blue lines arnav@kapoor:~/Desktop\$ sudo apt update sudo apt install build-essential libgsl-dev wget

[sudo] password for arnav:

Hit:1 https://download.docker.com/linux/ubuntu noble InRelease

Hit:2 https://packages.microsoft.com/repos/code stable InRelease

Hit:3 https://dl.google.com/linux/chrome/deb stable InRelease

Hit:4 http://archive.ubuntu.com/ubuntu jammy InRelease

Hit:5 http://in.archive.ubuntu.com/ubuntu noble InRelease

Hit:6 http://security.ubuntu.com/ubuntu noble-security InRelease

Hit:7 http://packages.ros.org/ros2/ubuntu noble InRelease

Hit:8 http://in.archive.ubuntu.com/ubuntu noble-updates InRelease

Hit:9 https://ppa.launchpadcontent.net/malcscott/ppa/ubuntu noble InRelease

Hit:10 https://esm.ubuntu.com/apps/ubuntu noble-apps-security InRelease

Hit:11 https://ppa.launchpadcontent.net/touchegg/stable/ubuntu noble InRelease

Hit:12 http://in.archive.ubuntu.com/ubuntu noble-backports InRelease

Hit:13 https://esm.ubuntu.com/apps/ubuntu noble-apps-updates InRelease

Hit:14 https://esm.ubuntu.com/infra/ubuntu noble-infra-security InRelease

Hit:15 https://esm.ubuntu.com/infra/ubuntu noble-infra-updates InRelease

Hit:16 https://esm.ubuntu.com/realtime/ubuntu noble InRelease

Reading package lists... Done

Building dependency tree... Done

Reading state information... Done

14 packages can be upgraded. Run 'apt list --upgradable' to see them.

Reading package lists... Done

Building dependency tree... Done

Reading state information... Done

build-essential is already the newest version (12.10ubuntu1).

libgsl-dev is already the newest version (2.7.1+dfsg-6ubuntu2).

wget is already the newest version (1.21.4-1ubuntu4.1).

wget set to manually installed.

0 upgraded, 0 newly installed, 0 to remove and 14 not upgraded.

arnav@kapoor:~/Desktop\$ sudo apt upgrade

Reading package lists... Done

Building dependency tree... Done

Reading state information... Done

Calculating upgrade... Done

The following upgrades have been deferred due to phasing:

ibverbs-providers libibverbs1 libqt5qml5 libqt5qmlmodels5 libqt5quick5 librdmacm1t64

libtraceevent1 libtraceevent1-plugin

update-notifier update-notifier-common

The following packages will be upgraded:

cloud-init gstreamer1.0-plugins-bad libgstreamer-plugins-bad1.0-0 openssh-client

4 upgraded, 0 newly installed, 0 to remove and 10 not upgraded.

2 esm-apps security updates

Need to get 5,394 kB of archives.

After this operation, 33.8 kB of additional disk space will be used.

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

```
Get:1 http://in.archive.ubuntu.com/ubuntu noble-updates/main amd64 openssh-client amd64
1:9.6p1-3ubuntu13.12 [905 kB]
Get:2 https://esm.ubuntu.com/apps/ubuntu noble-apps-security/main amd64
gstreamer1.0-plugins-bad amd64 1.24.2-1ubuntu4+esm1 [3,084 kB]
Get:3 http://in.archive.ubuntu.com/ubuntu noble-updates/main amd64 cloud-init all
25.1.2-0ubuntu0~24.04.1 [607 kB]
Get:4 https://esm.ubuntu.com/apps/ubuntu noble-apps-security/main amd64
libgstreamer-plugins-bad1.0-0 amd64 1.24.2-1ubuntu4+esm1 [798 kB]
Fetched 5,394 kB in 4s (1,422 kB/s)
Preconfiguring packages ...
(Reading database ... 345615 files and directories currently installed.)
Preparing to unpack .../openssh-client 1%3a9.6p1-3ubuntu13.12 amd64.deb ...
Unpacking openssh-client (1:9.6p1-3ubuntu13.12) over (1:9.6p1-3ubuntu13.11) ...
Preparing to unpack .../gstreamer1.0-plugins-bad_1.24.2-1ubuntu4+esm1_amd64.deb ...
Unpacking gstreamer1.0-plugins-bad:amd64 (1.24.2-1ubuntu4+esm1) over
(1.24.2-1ubuntu4) ...
Preparing to unpack .../libgstreamer-plugins-bad1.0-0_1.24.2-1ubuntu4+esm1_amd64.deb
Unpacking libgstreamer-plugins-bad1.0-0:amd64 (1.24.2-1ubuntu4+esm1) over
(1.24.2-1ubuntu4) ...
Preparing to unpack .../cloud-init 25.1.2-0ubuntu0~24.04.1 all.deb ...
Unpacking cloud-init (25.1.2-0ubuntu0~24.04.1) over (24.4.1-0ubuntu0~24.04.3) ...
dpkg: warning: unable to delete old directory '/lib/systemd/system/sshd-keygen@.service.d':
Directory not empty
Setting up cloud-init (25.1.2-0ubuntu0~24.04.1) ...
Installing new version of config file /etc/cloud/templates/sources.list.debian.deb822.tmpl ...
Installing new version of config file /etc/cloud/templates/sources.list.ubuntu.deb822.tmpl ...
Setting up openssh-client (1:9.6p1-3ubuntu13.12) ...
Setting up libgstreamer-plugins-bad1.0-0:amd64 (1.24.2-1ubuntu4+esm1) ...
Setting up gstreamer1.0-plugins-bad:amd64 (1.24.2-1ubuntu4+esm1) ...
Processing triggers for rsyslog (8.2312.0-3ubuntu9.1) ...
Processing triggers for man-db (2.12.0-4build2) ...
Processing triggers for libc-bin (2.39-0ubuntu8.4) ...
arnav@kapoor:~/Desktop$ wget
https://www.mpi-hd.mpg.de/personalhomes/globes/download/globes-3.2.18.tar.gz
--2025-06-07 10:41:26--
https://www.mpi-hd.mpg.de/personalhomes/globes/download/globes-3.2.18.tar.gz
Resolving www.mpi-hd.mpg.de (www.mpi-hd.mpg.de)... 149.217.99.101
Connecting to www.mpi-hd.mpg.de (www.mpi-hd.mpg.de)|149.217.99.101|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 2003810 (1.9M) [application/x-gzip]
Saving to: 'globes-3.2.18.tar.gz'
globes-3.2.18.tar.gz
1.91M 1.05MB/s in 1.8s
```

2025-06-07 10:41:29 (1.05 MB/s) - 'globes-3.2.18.tar.gz' saved [2003810/2003810]

arnav@kapoor:~/Desktop\$ tar -xzvf globes-3.2.18.tar.gz globes-3.2.18/ globes-3.2.18/depcomp globes-3.2.18/globes-config.in globes-3.2.18/INSTALL globes-3.2.18/configure globes-3.2.18/configure.in globes-3.2.18/doc/ globes-3.2.18/doc/globes-discovery.1 globes-3.2.18/doc/Makefile.in globes-3.2.18/doc/Makefile.am globes-3.2.18/config.sub globes-3.2.18/NEWS globes-3.2.18/mkinstalldirs globes-3.2.18/Makefile.in globes-3.2.18/config.rpath globes-3.2.18/m4/ globes-3.2.18/m4/gnulib.m4 globes-3.2.18/m4/ltsugar.m4 globes-3.2.18/m4/uintmax_t.m4 globes-3.2.18/m4/swig.m4 globes-3.2.18/m4/gnulib-cache.m4 globes-3.2.18/m4/libtool.m4 globes-3.2.18/m4/stdint_h.m4 globes-3.2.18/m4/exitfail.m4 globes-3.2.18/m4/ltversion.m4 globes-3.2.18/m4/inttypes_h.m4 globes-3.2.18/m4/ulonglong.m4 globes-3.2.18/m4/lt~obsolete.m4 globes-3.2.18/m4/swig perl.m4 globes-3.2.18/m4/rpm.m4 globes-3.2.18/m4/gsl.m4 globes-3.2.18/m4/obstack.m4 globes-3.2.18/m4/ltoptions.m4 globes-3.2.18/globes.spec.in globes-3.2.18/source/ globes-3.2.18/source/glb_fluxes.h globes-3.2.18/source/glb_parser.y globes-3.2.18/source/glb_lexer.h globes-3.2.18/source/glb prior.c globes-3.2.18/source/glb_parser.h globes-3.2.18/source/glb_tools_parser.h globes-3.2.18/source/glb_parser_addons.h globes-3.2.18/source/glb_profile.h

globes-3.2.18/source/Makefile.in globes-3.2.18/source/glb_smear.h globes-3.2.18/source/glb_error.h globes-3.2.18/source/glb_parser.c

```
globes-3.2.18/source/glb_parser_type.h
```

- globes-3.2.18/source/glb_lexer.c
- globes-3.2.18/source/glb lexer.l
- globes-3.2.18/source/glb_multiex.h
- globes-3.2.18/source/glb_tools_header.h
- globes-3.2.18/source/glb_tools_eightfold.c
- globes-3.2.18/source/glb_smear.c
- globes-3.2.18/source/glb path.c
- globes-3.2.18/source/globes-simple.c
- globes-3.2.18/source/glb sys.c
- globes-3.2.18/source/glb_prior.h
- globes-3.2.18/source/glb_minimize.h
- globes-3.2.18/source/glb_compat.c
- globes-3.2.18/source/glb_glb.c
- globes-3.2.18/source/glb types.h
- globes-3.2.18/source/glb_probability.h
- globes-3.2.18/source/glb_rate_engine.h
- globes-3.2.18/source/glb_tools_parser.c
- globes-3.2.18/source/glb_wrapper.c
- globes-3.2.18/source/glb_min_sup.h
- globes-3.2.18/source/glb_tools_header.c
- globes-3.2.18/source/glb_wrapper.h
- globes-3.2.18/source/glb_probability.c
- globes-3.2.18/source/globes.c
- globes-3.2.18/source/glb version.c
- globes-3.2.18/source/glb_min_sup.c
- globes-3.2.18/source/glb_fluxes.c
- globes-3.2.18/source/globes-discovery.c
- globes-3.2.18/source/glb_rate_engine.c
- globes-3.2.18/source/Makefile.am
- globes-3.2.18/source/glb_multiex.c
- globes-3.2.18/source/globes-deltatheta.c
- globes-3.2.18/source/glb sys.h
- globes-3.2.18/source/glb_error.c
- globes-3.2.18/source/glb_tools_eightfold.h
- globes-3.2.18/source/globes-accuracy.c
- globes-3.2.18/source/glb_profile.c
- globes-3.2.18/source/glb_path.h
- globes-3.2.18/source/glb_version.h
- globes-3.2.18/source/glb_minimize.c
- globes-3.2.18/compile
- globes-3.2.18/TODO
- globes-3.2.18/config-h.in
- globes-3.2.18/COPYING
- globes-3.2.18/aclocal.m4
- globes-3.2.18/data/
- globes-3.2.18/data/md5-sums
- globes-3.2.18/data/SuperBeam/

```
globes-3.2.18/data/SuperBeam/NOvA/
```

- globes-3.2.18/data/SuperBeam/NOvA/XNC.dat
- globes-3.2.18/data/SuperBeam/NOvA/XCC.dat
- globes-3.2.18/data/SuperBeam/NOvA/NOvA.glb
- globes-3.2.18/data/SuperBeam/NOvA/NOvAminus.dat
- globes-3.2.18/data/SuperBeam/NOvA/NOvAplus.dat
- globes-3.2.18/data/SuperBeam/T2HK/
- globes-3.2.18/data/SuperBeam/T2HK/XNC.dat
- globes-3.2.18/data/SuperBeam/T2HK/XCC.dat
- globes-3.2.18/data/SuperBeam/T2HK/XQE.dat
- globes-3.2.18/data/SuperBeam/T2HK/JHFminus.dat
- globes-3.2.18/data/SuperBeam/T2HK/T2HK.glb
- globes-3.2.18/data/SuperBeam/T2HK/JHFplus.dat
- globes-3.2.18/data/SuperBeam/T2K/
- globes-3.2.18/data/SuperBeam/T2K/XNC.dat
- globes-3.2.18/data/SuperBeam/T2K/XCC.dat
- globes-3.2.18/data/SuperBeam/T2K/XQE.dat
- globes-3.2.18/data/SuperBeam/T2K/JHFminus.dat
- globes-3.2.18/data/SuperBeam/T2K/JHFplus.dat
- globes-3.2.18/data/SuperBeam/T2K/T2K.glb
- globes-3.2.18/data/SuperBeam/SPL/
- globes-3.2.18/data/SuperBeam/SPL/XNC_spl.dat
- globes-3.2.18/data/SuperBeam/SPL/XCC spl.dat
- globes-3.2.18/data/SuperBeam/SPL/Mig_WC_numubar.dat
- globes-3.2.18/data/SuperBeam/SPL/Mig WC numu.dat
- globes-3.2.18/data/SuperBeam/SPL/SPLplus.dat
- globes-3.2.18/data/SuperBeam/SPL/SPL.glb
- globes-3.2.18/data/SuperBeam/SPL/Mig WC nuebar.dat
- globes-3.2.18/data/SuperBeam/SPL/Mig_WC_nue.dat
- globes-3.2.18/data/SuperBeam/SPL/SPLminus.dat
- globes-3.2.18/data/Makefile.in
- globes-3.2.18/data/NuFact/
- globes-3.2.18/data/NuFact/GoldSilver/
- globes-3.2.18/data/NuFact/GoldSilver/XNC.dat
- globes-3.2.18/data/NuFact/GoldSilver/XCC.dat
- globes-3.2.18/data/NuFact/GoldSilver/NF_GoldSilver.glb
- globes-3.2.18/data/NuFact/Standard/
- globes-3.2.18/data/NuFact/Standard/XNC.dat
- globes-3.2.18/data/NuFact/Standard/XCC.dat
- globes-3.2.18/data/NuFact/Standard/NFstandard.glb
- globes-3.2.18/data/NuFact/Variable/
- globes-3.2.18/data/NuFact/Variable/XNC.dat
- globes-3.2.18/data/NuFact/Variable/XCC.dat
- globes-3.2.18/data/NuFact/Variable/NFvar.glb
- globes-3.2.18/data/NuFact/HighResLowThresh/
- globes-3.2.18/data/NuFact/HighResLowThresh/XNC.dat
- globes-3.2.18/data/NuFact/HighResLowThresh/XCC.dat
- globes-3.2.18/data/NuFact/HighResLowThresh/NF_hR_IT.glb

```
globes-3.2.18/data/Reactor/
```

- globes-3.2.18/data/Reactor/small/
- globes-3.2.18/data/Reactor/small/Reactor.dat
- globes-3.2.18/data/Reactor/small/XCCreactor.dat
- globes-3.2.18/data/Reactor/small/Reactor1.glb
- globes-3.2.18/data/Reactor/DoubleCHOOZ/
- globes-3.2.18/data/Reactor/DoubleCHOOZ/D-Chooz_near.glb
- globes-3.2.18/data/Reactor/DoubleCHOOZ/Reactor.dat
- globes-3.2.18/data/Reactor/DoubleCHOOZ/XCCreactor.dat
- globes-3.2.18/data/Reactor/DoubleCHOOZ/D-Chooz far.glb
- globes-3.2.18/data/Reactor/large/
- globes-3.2.18/data/Reactor/large/Reactor.dat
- globes-3.2.18/data/Reactor/large/XCCreactor.dat
- globes-3.2.18/data/Reactor/large/Reactor2.glb
- globes-3.2.18/data/Makefile.am
- globes-3.2.18/data/BetaBeam/
- globes-3.2.18/data/BetaBeam/BB350/
- globes-3.2.18/data/BetaBeam/BB350/XNC.dat
- globes-3.2.18/data/BetaBeam/BB350/XCC.dat
- globes-3.2.18/data/BetaBeam/BB350/HeBckgRej350.dat
- globes-3.2.18/data/BetaBeam/BB350/HeDisEffMig350.dat
- globes-3.2.18/data/BetaBeam/BB350/HeEffMig350.dat
- globes-3.2.18/data/BetaBeam/BB350/BB_350.glb
- globes-3.2.18/data/BetaBeam/BB350/NeBckgRej350.dat
- globes-3.2.18/data/BetaBeam/BB350/BB350flux.dat
- globes-3.2.18/data/BetaBeam/BB350/NeEffMig350.dat
- globes-3.2.18/data/BetaBeam/BB350/NeDisEffMig350.dat
- globes-3.2.18/data/BetaBeam/BB100/
- globes-3.2.18/data/BetaBeam/BB100/BeamBckg_100.dat
- globes-3.2.18/data/BetaBeam/BB100/Mig WC numubar.dat
- globes-3.2.18/data/BetaBeam/BB100/Null.dat
- globes-3.2.18/data/BetaBeam/BB100/BB100flux_Ne.dat
- globes-3.2.18/data/BetaBeam/BB100/BB100flux He.dat
- globes-3.2.18/data/BetaBeam/BB100/BB_100.glb
- globes-3.2.18/data/BetaBeam/BB100/Mig_WC_numu.dat
- globes-3.2.18/data/BetaBeam/BB100/XNC_Nuance.dat
- globes-3.2.18/data/BetaBeam/BB100/AtmBckg_100.dat
- globes-3.2.18/data/BetaBeam/BB100/Mig_WC_nuebar.dat
- globes-3.2.18/data/BetaBeam/BB100/Mig WC nue.dat
- globes-3.2.18/data/BetaBeam/BB100/XCC Nuance.dat
- globes-3.2.18/data/BetaBeam/BB_TASD/
- globes-3.2.18/data/BetaBeam/BB_TASD/XNC.dat
- globes-3.2.18/data/BetaBeam/BB_TASD/XCC.dat
- globes-3.2.18/data/BetaBeam/BB_TASD/BBvar_TASD.glb
- globes-3.2.18/data/BetaBeam/BB WC/
- globes-3.2.18/data/BetaBeam/BB_WC/XNC.dat
- globes-3.2.18/data/BetaBeam/BB_WC/XCC.dat
- globes-3.2.18/data/BetaBeam/BB_WC/XQE.dat

```
globes-3.2.18/data/BetaBeam/BB_WC/BBvar_WC.glb
```

- globes-3.2.18/data/BetaBeam/BB_WC/BckgMig_var.dat
- globes-3.2.18/Makefile.am
- globes-3.2.18/README
- globes-3.2.18/ylwrap
- globes-3.2.18/missing
- globes-3.2.18/lib/
- globes-3.2.18/lib/gettext.h
- globes-3.2.18/lib/Makefile.in
- globes-3.2.18/lib/obstack.c
- globes-3.2.18/lib/obstack.h
- globes-3.2.18/lib/exitfail.c
- globes-3.2.18/lib/Makefile.am
- globes-3.2.18/lib/exitfail.h
- globes-3.2.18/lib/exit.h
- globes-3.2.18/acinclude.m4
- globes-3.2.18/config.guess
- globes-3.2.18/AUTHORS
- globes-3.2.18/globes.m4
- globes-3.2.18/ChangeLog
- globes-3.2.18/install-sh
- globes-3.2.18/BUGS
- globes-3.2.18/examples/
- globes-3.2.18/examples/XNC.dat
- globes-3.2.18/examples/example2.c
- globes-3.2.18/examples/XCC.dat
- globes-3.2.18/examples/D-Chooz near.glb
- globes-3.2.18/examples/Makefile.in
- globes-3.2.18/examples/Reactor.dat
- globes-3.2.18/examples/myio.h
- globes-3.2.18/examples/XCCreactor.dat
- globes-3.2.18/examples/NFstandard.glb
- globes-3.2.18/examples/example1.c
- globes-3.2.18/examples/example4.c
- globes-3.2.18/examples/example5.c
- globes-3.2.18/examples/Reactor1.glb
- globes-3.2.18/examples/example3.c
- globes-3.2.18/examples/D-Chooz_far.glb
- globes-3.2.18/examples/example-tour.c
- globes-3.2.18/examples/myio.c
- globes-3.2.18/examples/example6.c
- globes-3.2.18/examples/DocPlots.nb
- globes-3.2.18/ltmain.sh
- globes-3.2.18/Itconfig
- globes-3.2.18/globes/
- globes-3.2.18/globes/glb-modules.h
- globes-3.2.18/globes/globes.i
- globes-3.2.18/globes/Makefile.in

```
globes-3.2.18/globes/globes.h
globes-3.2.18/globes/globes.pm
globes-3.2.18/globes/Makefile.am
globes-3.2.18/globes/example.pl.in
globes-3.2.18/globes/globes perl.c
arnav@kapoor:~/Desktop$ cd globes-3.2.18
arnav@kapoor:~/Desktop/globes-3.2.18$ ./configure
checking for a BSD-compatible install... /usr/bin/install -c
checking whether build environment is sane... yes
/home/arnav/Desktop/globes-3.2.18/missing: Unknown `--is-lightweight' option
Try '/home/arnav/Desktop/globes-3.2.18/missing --help' for more information
configure: WARNING: 'missing' script is too old or missing
checking for a thread-safe mkdir -p... /usr/bin/mkdir -p
checking for gawk... no
checking for mawk... mawk
checking whether make sets $(MAKE)... yes
checking whether make supports nested variables... yes
checking whether to enable maintainer-specific portions of Makefiles... no
checking whether make supports nested variables... (cached) yes
checking for gcc... gcc
checking whether the C compiler works... yes
checking for C compiler default output file name... a.out
checking for suffix of executables...
checking whether we are cross compiling... no
checking for suffix of object files... o
checking whether we are using the GNU C compiler... yes
checking whether gcc accepts -g... yes
checking for gcc option to accept ISO C89... none needed
checking whether gcc understands -c and -o together... yes
checking whether make supports the include directive... yes (GNU style)
checking dependency style of gcc... gcc3
checking for gcc option to accept ISO C99... none needed
checking how to run the C preprocessor... gcc -E
checking whether In -s works... yes
checking for bison... bison -y
checking for flex... flex
checking lex output file root... lex.yy
checking lex library... -Ifl
checking whether yytext is a pointer... yes
checking build system type... x86 64-unknown-linux-gnu
checking host system type... x86_64-unknown-linux-gnu
checking how to print strings... printf
checking for a sed that does not truncate output... /usr/bin/sed
checking for grep that handles long lines and -e... /usr/bin/grep
checking for egrep... /usr/bin/grep -E
checking for fgrep... /usr/bin/grep -F
checking for ld used by gcc... /usr/bin/ld
checking if the linker (/usr/bin/ld) is GNU ld... yes
```

```
checking for BSD- or MS-compatible name lister (nm)... /usr/bin/nm -B
checking the name lister (/usr/bin/nm -B) interface... BSD nm
checking the maximum length of command line arguments... 1572864
checking whether the shell understands some XSI constructs... yes
checking whether the shell understands "+="... yes
checking how to convert x86 64-unknown-linux-gnu file names to
x86_64-unknown-linux-gnu format... func_convert_file_noop
checking how to convert x86 64-unknown-linux-gnu file names to toolchain format...
func convert file noop
checking for /usr/bin/ld option to reload object files... -r
checking for objdump... objdump
checking how to recognize dependent libraries... pass all
checking for dlltool... no
checking how to associate runtime and link libraries... printf %s\n
checking for ar... ar
checking for archiver @FILE support... @
checking for strip... strip
checking for ranlib... ranlib
checking command to parse /usr/bin/nm -B output from gcc object... ok
checking for sysroot... no
checking for mt... mt
checking if mt is a manifest tool... no
checking for ANSI C header files... yes
checking for sys/types.h... yes
checking for sys/stat.h... yes
checking for stdlib.h... yes
checking for string.h... yes
checking for memory.h... yes
checking for strings.h... yes
checking for inttypes.h... yes
checking for stdint.h... yes
checking for unistd.h... yes
checking for dlfcn.h... ves
checking for objdir....libs
checking if gcc supports -fno-rtti -fno-exceptions... no
checking for gcc option to produce PIC... -fPIC -DPIC
checking if gcc PIC flag -fPIC -DPIC works... yes
checking if gcc static flag -static works... yes
checking if gcc supports -c -o file.o... yes
checking if gcc supports -c -o file.o... (cached) yes
checking whether the gcc linker (/usr/bin/ld -m elf_x86_64) supports shared libraries... yes
checking whether -lc should be explicitly linked in... no
checking dynamic linker characteristics... GNU/Linux ld.so
checking how to hardcode library paths into programs... immediate
checking whether stripping libraries is possible... yes
checking if libtool supports shared libraries... yes
checking whether to build shared libraries... yes
checking whether to build static libraries... yes
```

```
checking for inttypes.h... yes
checking for stdint.h... yes
checking for unsigned long long... yes
checking for obstacks... yes
checking for swig... no
checking for main in -lm... yes
checking for gsl-config... /usr/bin/gsl-config
checking for GSL - version >= 0.2.5... yes
checking gsl/gsl math.h usability... yes
checking gsl/gsl math.h presence... yes
checking for gsl/gsl_math.h... yes
checking gsl/gsl_sf_erf.h usability... yes
checking gsl/gsl_sf_erf.h presence... yes
checking for gsl/gsl_sf_erf.h... yes
checking gsl/gsl errno.h usability... yes
checking gsl/gsl errno.h presence... yes
checking for gsl/gsl_errno.h... yes
checking for ANSI C header files... (cached) yes
checking for an ANSI C-conforming const... yes
checking for size t... yes
checking for strdup... yes
checking for mkstemp... yes
checking for tempnam... yes
checking for working alloca.h... yes
checking for alloca... yes
Not trying to build rpms for your system (use --enable-rpm-rules to override)
checking that generated files are newer than configure... done
configure: creating ./config.status
config.status: creating globes.spec
config.status: creating Makefile
config.status: creating globes/Makefile
config.status: creating globes/example.pl
config.status: creating source/Makefile
config.status: creating examples/Makefile
config.status: creating data/Makefile
config.status: creating globes-config
config.status: creating doc/Makefile
config.status: creating lib/Makefile
config.status: creating config.h
config.status: executing depfiles commands
config.status: executing libtool commands
************
       After 'make install':
* Do not forget to run 'Idconfig' as root! *
************
arnav@kapoor:~/Desktop/globes-3.2.18$ make
make all-recursive
```

make[1]: Entering directory '/home/arnav/Desktop/globes-3.2.18'

```
Making all in lib
make[2]: Entering directory '/home/arnav/Desktop/globes-3.2.18/lib'
make all-am
make[3]: Entering directory '/home/arnav/Desktop/globes-3.2.18/lib'
 CC
         exitfail.lo
 CCLD
          libgnu.la
ar: `u' modifier ignored since `D' is the default (see `U')
make[3]: Leaving directory '/home/arnav/Desktop/globes-3.2.18/lib'
make[2]: Leaving directory '/home/arnav/Desktop/globes-3.2.18/lib'
Making all in source
make[2]: Entering directory '/home/arnav/Desktop/globes-3.2.18/source'
make[3]: Entering directory '/home/arnav/Desktop/globes-3.2.18/source'
 CC
         globes.o
 CC
         libglobes la-glb minimize.lo
 CC
         libglobes la-glb error.lo
 CC
         libglobes_la-glb_path.lo
 CC
         libglobes la-glb multiex.lo
 CC
         libglobes_la-glb_version.lo
 CC
         libglobes la-glb rate engine.lo
 CC
         libglobes la-glb parser.lo
glb parser.y: In function 'glbInitExperiment':
glb_parser.y:2176:16: warning: format '%c' expects argument of type 'char *', but argument 3
has type 'char (*)[11]' [-Wformat=]
2176 | fscanf(input,"%8c",&tct);
                  char (*)[11]
glb_parser.y:2176:3: warning: ignoring return value of 'fscanf' declared with attribute
'warn unused result' [-Wunused-result]
2176 | fscanf(input,"%8c",&tct);
 CC
         libglobes la-glb min sup.lo
 CC
         libglobes_la-glb_fluxes.lo
 CC
         libglobes_la-glb_smear.lo
 CC
         libglobes la-glb lexer.lo
glb_lexer.c: In function 'yy_init_buffer':
glb lexer.c:2436:40: warning: implicit declaration of function 'isatty'
[-Wimplicit-function-declaration]
2436 |
            b->yy is interactive = file ? (isatty( fileno(file) ) > 0) : 0;
   1
 CC
         libglobes la-glb probability.lo
 CC
         libglobes la-glb profile.lo
glb_profile.c: In function 'glbLoadProfileData':
glb profile.c:122:31: warning: ignoring return value of 'fscanf' declared with attribute
'warn_unused_result' [-Wunused-result]
          for (i=0; i<steps; i++) fscanf(fp,"%lf %lf",&l[i],&d[i]);
 122 |
   1
```

```
CC
        libglobes la-glb sys.lo
 CC
        libglobes_la-glb_wrapper.lo
 CC
        libglobes la-glb glb.lo
 CC
        libglobes_la-glb_prior.lo
 CC
        libglobes_la-glb_compat.lo
 CCLD
          libglobes.la
ar: `u' modifier ignored since `D' is the default (see `U')
 CCLD
          globes
 CC
        glb_tools_parser.o
glb tools parser.c: In function 'vector read double':
glb_tools_parser.c:109:13: warning: implicit declaration of function 'isspace'
[-Wimplicit-function-declaration]
 109 |
          while(isspace(wrk[0])) wrk++;
glb tools parser.c:33:1: note: include '<ctype.h>' or provide a declaration of 'isspace'
 32 | #include "globes/globes.h"
 +++ |+#include <ctype.h>
 33 |
 CC
        glb_tools_header.o
 CC
        glb_tools_eightfold.o
 CC
        globes-accuracy.o
 CCLD
          globes-accuracy
 CC
        globes-deltatheta.o
 CCLD
          globes-deltatheta
 CC
        globes-discovery.o
 CCLD
          globes-discovery
 CC
        globes-simple.o
 CCLD
          globes-simple
make[3]: Leaving directory '/home/arnav/Desktop/globes-3.2.18/source'
make[2]: Leaving directory '/home/arnav/Desktop/globes-3.2.18/source'
Making all in data
make[2]: Entering directory '/home/arnav/Desktop/globes-3.2.18/data'
make[2]: Nothing to be done for 'all'.
make[2]: Leaving directory '/home/arnav/Desktop/globes-3.2.18/data'
Making all in globes
make[2]: Entering directory '/home/arnav/Desktop/globes-3.2.18/globes'
make all-am
make[3]: Entering directory '/home/arnav/Desktop/globes-3.2.18/globes'
make[3]: Nothing to be done for 'all-am'.
make[3]: Leaving directory '/home/arnav/Desktop/globes-3.2.18/globes'
make[2]: Leaving directory '/home/arnav/Desktop/globes-3.2.18/globes'
Making all in doc
make[2]: Entering directory '/home/arnav/Desktop/globes-3.2.18/doc'
make[2]: Nothing to be done for 'all'.
make[2]: Leaving directory '/home/arnav/Desktop/globes-3.2.18/doc'
make[2]: Entering directory '/home/arnav/Desktop/globes-3.2.18'
make[2]: Leaving directory '/home/arnav/Desktop/globes-3.2.18'
make[1]: Leaving directory '/home/arnav/Desktop/globes-3.2.18'
```

arnav@kapoor:~/Desktop/globes-3.2.18\$ sudo make install

Making install in lib

make[1]: Entering directory '/home/arnav/Desktop/globes-3.2.18/lib' make install-am

make[2]: Entering directory '/home/arnav/Desktop/globes-3.2.18/lib'

make[3]: Entering directory '/home/arnav/Desktop/globes-3.2.18/lib'

make[3]: Nothing to be done for 'install-exec-am'.

make[3]: Nothing to be done for 'install-data-am'.

make[3]: Leaving directory '/home/arnav/Desktop/globes-3.2.18/lib'

make[2]: Leaving directory '/home/arnav/Desktop/globes-3.2.18/lib'

make[1]: Leaving directory '/home/arnav/Desktop/globes-3.2.18/lib'

Making install in source

make[1]: Entering directory '/home/arnav/Desktop/globes-3.2.18/source' make install-am

make[2]: Entering directory '/home/arnav/Desktop/globes-3.2.18/source'

make[3]: Entering directory '/home/arnav/Desktop/globes-3.2.18/source' /usr/bin/mkdir -p '/usr/local/lib'

/bin/bash ../libtool --mode=install /usr/bin/install -c libglobes.la '/usr/local/lib'

libtool: install: /usr/bin/install -c .libs/libglobes.so.8.3.2 /usr/local/lib/libglobes.so.8.3.2

libtool: install: (cd /usr/local/lib && { In -s -f libglobes.so.8.3.2 libglobes.so.8 || { rm -f

libglobes.so.8 && In -s libglobes.so.8.3.2 libglobes.so.8; }; })

libtool: install: (cd /usr/local/lib && { In -s -f libglobes.so.8.3.2 libglobes.so || { rm -f

libglobes.so && In -s libglobes.so.8.3.2 libglobes.so; }; })

libtool: install: /usr/bin/install -c .libs/libglobes.lai /usr/local/lib/libglobes.la

libtool: install: /usr/bin/install -c .libs/libglobes.a /usr/local/lib/libglobes.a

libtool: install: chmod 644 /usr/local/lib/libglobes.a

libtool: install: ranlib /usr/local/lib/libglobes.a

libtool: finish: PATH="/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/sbin:/sbin/sbin"

Idconfig -n /usr/local/lib

Libraries have been installed in:

/usr/local/lib

If you ever happen to want to link against installed libraries in a given directory, LIBDIR, you must either use libtool, and specify the full pathname of the library, or use the `-LLIBDIR' flag during linking and do at least one of the following:

- add LIBDIR to the `LD_LIBRARY_PATH' environment variable during execution
- add LIBDIR to the `LD_RUN_PATH' environment variable during linking
- use the '-WI,-rpath -WI,LIBDIR' linker flag
- have your system administrator add LIBDIR to `/etc/ld.so.conf'

See any operating system documentation about shared libraries for more information, such as the ld(1) and ld.so(8) manual pages.

/usr/bin/mkdir -p '/usr/local/bin'

/bin/bash ../libtool --mode=install /usr/bin/install -c globes globes-accuracy

globes-deltatheta globes-discovery globes-simple '/usr/local/bin'

libtool: install: /usr/bin/install -c .libs/globes /usr/local/bin/globes

libtool: install: /usr/bin/install -c .libs/globes-accuracy /usr/local/bin/globes-accuracy

libtool: install: /usr/bin/install -c .libs/globes-deltatheta /usr/local/bin/globes-deltatheta

libtool: install: /usr/bin/install -c .libs/globes-discovery /usr/local/bin/globes-discovery

libtool: install: /usr/bin/install -c .libs/globes-simple /usr/local/bin/globes-simple

make[3]: Nothing to be done for 'install-data-am'.

make[3]: Leaving directory '/home/arnav/Desktop/globes-3.2.18/source'

make[2]: Leaving directory '/home/arnav/Desktop/globes-3.2.18/source'

make[1]: Leaving directory '/home/arnav/Desktop/globes-3.2.18/source'

Making install in data

make[1]: Entering directory '/home/arnav/Desktop/globes-3.2.18/data'

make[2]: Entering directory '/home/arnav/Desktop/globes-3.2.18/data'

make[2]: Nothing to be done for 'install-exec-am'.

/usr/bin/mkdir -p '/usr/local/share/globes'

/usr/bin/mkdir -p '/usr/local/share/globes/SuperBeam/T2HK'

/usr/bin/install -c -m 644 SuperBeam/T2HK/JHFminus.dat SuperBeam/T2HK/JHFplus.dat

SuperBeam/T2HK/T2HK.glb SuperBeam/T2HK/XCC.dat SuperBeam/T2HK/XNC.dat

SuperBeam/T2HK/XQE.dat '/usr/local/share/globes/SuperBeam/T2HK'

/usr/bin/mkdir -p '/usr/local/share/globes/NuFact/Variable'

/usr/bin/install -c -m 644 NuFact/Variable/NFvar.glb NuFact/Variable/XCC.dat

NuFact/Variable/XNC.dat '/usr/local/share/globes/NuFact/Variable'

/usr/bin/mkdir -p '/usr/local/share/globes/SuperBeam/T2K'

/usr/bin/install -c -m 644 SuperBeam/T2K/JHFminus.dat SuperBeam/T2K/JHFplus.dat

SuperBeam/T2K/T2K.glb SuperBeam/T2K/XCC.dat SuperBeam/T2K/XNC.dat

SuperBeam/T2K/XQE.dat '/usr/local/share/globes/SuperBeam/T2K'

/usr/bin/mkdir -p '/usr/local/share/globes/BetaBeam/BB WC'

/usr/bin/install -c -m 644 BetaBeam/BB_WC/BBvar_WC.glb

BetaBeam/BB WC/BckgMig var.dat BetaBeam/BB WC/XCC.dat

BetaBeam/BB_WC/XNC.dat BetaBeam/BB_WC/XQE.dat

'/usr/local/share/globes/BetaBeam/BB_WC'

/usr/bin/mkdir -p '/usr/local/share/globes/BetaBeam/BB TASD'

/usr/bin/install -c -m 644 BetaBeam/BB_TASD/BBvar_TASD.glb

BetaBeam/BB TASD/XCC.dat BetaBeam/BB TASD/XNC.dat

'/usr/local/share/globes/BetaBeam/BB_TASD'

/usr/bin/mkdir -p '/usr/local/share/globes/BetaBeam/BB100'

/usr/bin/install -c -m 644 BetaBeam/BB100/AtmBckg_100.dat

BetaBeam/BB100/BB100flux He.dat BetaBeam/BB100/BB100flux Ne.dat

BetaBeam/BB100/BB 100.glb BetaBeam/BB100/BeamBckg 100.dat

BetaBeam/BB100/Mig_WC_nue.dat BetaBeam/BB100/Mig_WC_nuebar.dat

BetaBeam/BB100/Mig_WC_numu.dat BetaBeam/BB100/Mig_WC_numubar.dat

BetaBeam/BB100/Null.dat BetaBeam/BB100/XCC_Nuance.dat

BetaBeam/BB100/XNC_Nuance.dat '/usr/local/share/globes/BetaBeam/BB100'

/usr/bin/mkdir -p '/usr/local/share/globes/Reactor/large'

/usr/bin/install -c -m 644 Reactor/large/Reactor.dat Reactor/large/Reactor2.glb

Reactor/large/XCCreactor.dat '/usr/local/share/globes/Reactor/large'

/usr/bin/mkdir -p '/usr/local/share/globes/BetaBeam/BB350'

/usr/bin/install -c -m 644 BetaBeam/BB350/BB350flux.dat BetaBeam/BB350/BB 350.glb

BetaBeam/BB350/HeBckgRej350.dat BetaBeam/BB350/HeDisEffMig350.dat

BetaBeam/BB350/HeEffMig350.dat BetaBeam/BB350/NeBckgRej350.dat

BetaBeam/BB350/NeDisEffMig350.dat BetaBeam/BB350/NeEffMig350.dat

BetaBeam/BB350/XCC.dat BetaBeam/BB350/XNC.dat

'/usr/local/share/globes/BetaBeam/BB350'

/usr/bin/mkdir -p '/usr/local/share/globes/Reactor/DoubleCHOOZ'

/usr/bin/install -c -m 644 Reactor/DoubleCHOOZ/D-Chooz_far.glb

Reactor/DoubleCHOOZ/D-Chooz near.glb Reactor/DoubleCHOOZ/Reactor.dat

Reactor/DoubleCHOOZ/XCCreactor.dat '/usr/local/share/globes/Reactor/DoubleCHOOZ'

/usr/bin/mkdir -p '/usr/local/share/globes/NuFact/Standard'

/usr/bin/install -c -m 644 NuFact/Standard/NFstandard.glb NuFact/Standard/XCC.dat

NuFact/Standard/XNC.dat '/usr/local/share/globes/NuFact/Standard'

/usr/bin/mkdir -p '/usr/local/share/globes/NuFact/GoldSilver'

/usr/bin/install -c -m 644 NuFact/GoldSilver/NF_GoldSilver.glb NuFact/GoldSilver/XCC.dat

NuFact/GoldSilver/XNC.dat '/usr/local/share/globes/NuFact/GoldSilver'

/usr/bin/mkdir -p '/usr/local/share/globes/NuFact/HighResLowThresh'

/usr/bin/install -c -m 644 NuFact/HighResLowThresh/NF hR IT.glb

NuFact/HighResLowThresh/XCC.dat NuFact/HighResLowThresh/XNC.dat

'/usr/local/share/globes/NuFact/HighResLowThresh'

/usr/bin/mkdir -p '/usr/local/share/globes/SuperBeam/SPL'

/usr/bin/install -c -m 644 SuperBeam/SPL/Mig_WC_nue.dat

SuperBeam/SPL/Mig_WC_nuebar.dat SuperBeam/SPL/Mig_WC_numu.dat

SuperBeam/SPL/Mig_WC_numubar.dat SuperBeam/SPL/SPL.glb

SuperBeam/SPL/SPLminus.dat SuperBeam/SPL/SPLplus.dat SuperBeam/SPL/XCC spl.dat

SuperBeam/SPL/XNC_spl.dat '/usr/local/share/globes/SuperBeam/SPL'

/usr/bin/mkdir -p '/usr/local/share/globes/Reactor/small'

/usr/bin/install -c -m 644 Reactor/small/Reactor.dat Reactor/small/Reactor1.glb

Reactor/small/XCCreactor.dat '/usr/local/share/globes/Reactor/small'

/usr/bin/mkdir -p '/usr/local/share/globes/SuperBeam/NOvA'

/usr/bin/install -c -m 644 SuperBeam/NOvA/NOvA.glb SuperBeam/NOvA/NOvAminus.dat SuperBeam/NOvA/NOvAplus.dat SuperBeam/NOvA/XCC.dat SuperBeam/NOvA/XNC.dat

'/usr/local/share/globes/SuperBeam/NOvA'

make[2]: Leaving directory '/home/arnav/Desktop/globes-3.2.18/data'

make[1]: Leaving directory '/home/arnav/Desktop/globes-3.2.18/data'

Making install in globes

make[1]: Entering directory '/home/arnav/Desktop/globes-3.2.18/globes'

make install-am

make[2]: Entering directory '/home/arnav/Desktop/globes-3.2.18/globes'

make[3]: Entering directory '/home/arnav/Desktop/globes-3.2.18/globes'

make install-exec-hook

make[4]: Entering directory '/home/arnav/Desktop/globes-3.2.18/globes'

.

make[4]: Leaving directory '/home/arnav/Desktop/globes-3.2.18/globes'

/usr/bin/mkdir -p '/usr/local/include/globes'

/usr/bin/install -c -m 644 globes.h glb-modules.h '/usr/local/include/globes'

make[3]: Leaving directory '/home/arnav/Desktop/globes-3.2.18/globes'

make[2]: Leaving directory '/home/arnav/Desktop/globes-3.2.18/globes'

```
make[1]: Leaving directory '/home/arnav/Desktop/globes-3.2.18/globes'
Making install in doc
make[1]: Entering directory '/home/arnav/Desktop/globes-3.2.18/doc'
make[2]: Entering directory '/home/arnav/Desktop/globes-3.2.18/doc'
make[2]: Nothing to be done for 'install-exec-am'.
/usr/bin/mkdir -p '/usr/local/share/man/man1'
/usr/bin/install -c -m 644 globes-discovery.1 '/usr/local/share/man/man1'
make[2]: Leaving directory '/home/arnav/Desktop/globes-3.2.18/doc'
make[1]: Leaving directory '/home/arnav/Desktop/globes-3.2.18/doc'
make[1]: Entering directory '/home/arnav/Desktop/globes-3.2.18'
make[2]: Entering directory '/home/arnav/Desktop/globes-3.2.18'
/usr/bin/mkdir -p '/usr/local/bin'
/usr/bin/install -c globes-config '/usr/local/bin'
/usr/bin/mkdir -p '/usr/local/share/aclocal'
/usr/bin/install -c -m 644 globes.m4 '/usr/local/share/aclocal'
make[2]: Leaving directory '/home/arnav/Desktop/globes-3.2.18'
make[1]: Leaving directory '/home/arnav/Desktop/globes-3.2.18'
arnav@kapoor:~/Desktop/globes-3.2.18$ globes-config --version
Package 3.2.18
Library 11:2:3
arnav@kapoor:~/Desktop/globes-3.2.18$ cd examples
arnav@kapoor:~/Desktop/globes-3.2.18/examples$ Is
D-Chooz far.glb example1.c example4.c example-tour.c myio.c
                                                                    Reactor1.glb
XCCreactor.dat
D-Chooz near.glb example2.c example5.c Makefile
                                                       myio.h
                                                                 Reactor.dat XNC.dat
DocPlots.nb
               example3.c example6.c Makefile.in
                                                      NFstandard.glb XCC.dat
arnav@kapoor:~/Desktop/globes-3.2.18/examples$ gcc example1.c myio.c -o example1
`globes-config --cflags --libs`
myio.c: In function 'InitOutput':
myio.c:32:2: warning: format not a string literal and no format arguments [-Wformat-security]
 32 | if(strlen(THEFILE)==0) printf(headline);
myio.c:42:5: warning: format not a string literal and no format arguments [-Wformat-security]
 42 | fprintf(f,headline);
arnav@kapoor:~/Desktop/globes-3.2.18/examples$ ./example1
arnav@kapoor:~/Desktop/globes-3.2.18/examples$ Is -It
total 2852
-rw-rw-r-- 1 arnay arnay 54181 Jun 7 10:44 test1.dat
-rwxrwxr-x 1 arnav arnav 26128 Jun 7 10:44 example1
-rw-rw-r-- 1 arnav arnav 2879 Jun 7 10:41 Makefile
-rw-r--r-- 1 arnav arnav 17878 Jan 10 2012 example5.c
-rw-r--r-- 1 arnav arnav 142090 Jan 10 2012 XNC.dat
-rw-r--r-- 1 arnav arnav 5161 Nov 21 2007 D-Chooz far.glb
-rw-r--r-- 1 arnav arnav 5008 Nov 21 2007 D-Chooz near.glb
-rw-r--r-- 1 arnav arnav 2319930 Nov 21 2007 DocPlots.nb
-rw-r--r-- 1 arnav arnav 3032 Nov 21 2007 example1.c
-rw-r--r-- 1 arnav arnav 4041 Nov 21 2007 example2.c
```

By default, GLoBES just computes data (like χ^2 values or event rates) and logs them as text.