instalar :1.-sudo apt-get install binutils-dev

Activar bfd(https://networklessons.com/uncategorized/how-to-install-bfd-brute-force-detection-on-linux)

Antes tener esto

```
root@erikahp240G3:/home/erika/Descargas/bfd-1.5-2/files# bfd
Brute Force Detection v1.5-2 <bfd@r-fx.org>
        (C) 1999-2014, R-fx Networks <proj@r-fx.org>
        (C) 2014, Ryan MacDonald <ryan@r-fx.org>
This program may be freely redistributed under the terms of the GNU GPL

usage: /usr/local/sbin/bfd [OPTION]
```

```
root@erikahp240G3:/usr/local/bfd# bfd -s
Brute Force Detection v1.5-2 <bfd@r-fx.org>
        (C) 1999-2014, R-fx Networks <proj@r-fx.org>
        (C) 2014, Ryan MacDonald <ryan@r-fx.org>
This program may be freely redistributed under the terms of the GNU GPL

may 30 09:15:53 erikahp240G3 bfd(2110): processing rule file asterisk_badauth
may 30 09:15:53 erikahp240G3 bfd(2110): processing rule file asterisk_iax
may 30 09:15:53 erikahp240G3 bfd(2110): processing rule file asterisk_nopeer
may 30 09:15:53 erikahp240G3 bfd(2110): processing rule file courier
may 30 09:15:53 erikahp240G3 bfd(2110): processing rule file cpanel
may 30 09:15:53 erikahp240G3 bfd(2110): processing rule file dovecot
may 30 09:15:53 erikahp240G3 bfd(2110): processing rule file exim_authfail
may 30 09:15:53 erikahp240G3 bfd(2110): processing rule file exim_nxuser
may 30 09:15:53 erikahp240G3 bfd(2110): processing rule file modsec
may 30 09:15:53 erikahp240G3 bfd(2110): processing rule file openvpnas
may 30 09:15:53 erikahp240G3 bfd(2110): processing rule file postfix
may 30 09:15:53 erikahp240G3 bfd(2110): processing rule file proftpd
may 30 09:15:53 erikahp240G3 bfd(2110): processing rule file pure-ftpd
may 30 09:15:53 erikahp240G3 bfd(2110): processing rule file rh_imapd
may 30 09:15:53 erikahp240G3 bfd(2110): processing rule file rh_ipop3d
may 30 09:15:53 erikahp240G3 bfd(2110): processing rule file sendmail
may 30 09:15:53 erikahp240G3 bfd(2110): processing rule file sshd
may 30 09:15:53 erikahp240G3 bfd(2110): processing rule file vpopmail
may 30 09:15:53 erikahp240G3 bfd(2110): processing rule file vsftpd
may 30 09:15:53 erikahp240G3 bfd(2110): processing rule file vsftpd2
root@erikahp240G3:/usr/local/bfd# bfd
Brute Force Detection v1.5-2 <bfd@r-fx.org>
        (C) 1999-2014, R-fx Networks <proj@r-fx.org>
        (C) 2014, Ryan MacDonald <ryan@r-fx.org>
This program may be freely redistributed under the terms of the GNU GPL
```

./configure --prefix=/projects/mpip/mpiP-3.4.1/install LDFLAGS=-L/usr/lib64 --with-cc=mpicc --with-cxx=mpiCC --with-f77=mpif77

```
erika@erikahp240G3:~/Música/mpiP-3.4$ ./configure --prefix=/projects/mpip/mpiP-3.4.1/install LDFLAGS=-L/usr/lib64 --with-cc=mpicc --with-cx
piCC --with-f77=mpif77
checking build system type... x86_64-unknown-linux-gnu
checking host system type... x86_64-unknown-linux-gnu
checking target system type... x86_64-unknown-linux-gnu

  Note: mpiP sets cross_compiling to yes to keep configure from failing in
        the case where test executables would need to be run as a parallel job.

checking for a BSD-compatible install... /usr/bin/install -c
checking for ranlib... ranlib
checking for mpxlc... mpicc
checking for mpCC_r... mpiCC
checking for mpxlf_r... mpif77
checking for poe... no
checking for srun... no
checking for prun... no
checking for mpirun... mpirun
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... yes
checking for suffix of object files... o
checking whether we are using the GNU C compiler... yes
checking whether mpicc accepts -g... yes
checking for mpicc option to accept ISO C89... none needed
checking for sqrt in -lm... yes
checking whether MPI_Init is declared... yes
checking for library containing dlopen... -ldl
checking for inflate in -lz... yes
```

```
checking for MPI_Win_fence... yes
checking /proc/self/maps... yes
checking for getline... yes
checking fortran to C conversion... yes
checking fortran symbols... lowercase with underscore
checking fortran compiler... GNU
configure: creating ./config.status
config.status: creating Defs.mak
config.status: creating Makefile
config.status: creating testing/Makefile
config.status: creating Check.mak
config.status: creating mpiPi.h
config.status: creating mpi.protos.txt
config.status: creating get_fortran_arg.f
config.status: creating mpip_timers/aix_local.h
config.status: creating mpiPconfig.h
config.status: mpiPconfig.h is unchanged


*****************************************************
   mpiP Configuration Summary

   C compiler               : mpicc
   Fortran compiler         : mpif77

   Timer                    : MPI_Wtime
   Stack Unwinding          : libunwind
   Address to Source Lookup : bfd

   MPI-I/O support          : yes
   MPI-RMA support          : yes
*****************************************************
```

Ojo tiene que salir lo mismo que en la foto

make

Lo que sale

```
python ./make-wrappers.py --xlate --arch=x86_64 --f77symbol symbol_ mpi.protos.txt make-wrappers.py
MPI Wrapper Generator ($Revision: 498 $)
-----*----- Parsing input file
-----*----- Parsing completed:  162  functions found.
-----*----- Beginning parameter optimization
-----*----- Generating structure files
-----*----- Generating profiling wrappers
   Wrapped MPI_Accumulate
   Wrapped MPI_Allgather
   Wrapped MPI_Allgatherv
   Wrapped MPI_Allreduce
   Wrapped MPI_Alltoall
```

```
-----*----- Generating the lookup table
mpicc -g -O2 -I.  -DX86_64 -DLinux -c diag_msgs.c -o diag_msgs.o
mpicc -g -O2 -I.  -DX86_64 -DLinux -c mpiP-hash.c -o mpiP-hash.o
mpicc -g -O2 -I.  -DX86_64 -DLinux -c glob.c -o glob.o
mpicc -g -O2 -I.  -DX86_64 -DLinux -c wrappers.c -o wrappers.o
mpicc -g -O2 -I.  -DX86_64 -DLinux -c wrappers_special.c -o wrappers_special.o
mpicc -g -O2 -I.  -DX86_64 -DLinux -c mpiPi.c -o mpiPi.o
mpicc -g -O2 -I.  -DX86_64 -DLinux -c util.c -o util.o
mpicc -g -O2 -I.  -DX86_64 -DLinux -c lookup.c -o lookup.o
mpicc -g -O2 -I.  -DX86_64 -DLinux -c report.c -o report.o
mpicc -g -O2 -I.  -DX86_64 -DLinux -c pcontrol.c -o pcontrol.o
mpicc -g -O2 -I.  -DX86_64 -DLinux -c mpiP-API.c -o mpiP-API.o
mpicc -g -O2 -I.  -DX86_64 -DLinux -c record_stack.c -o record_stack.o
mpicc -g -O2 -I.  -DX86_64 -DLinux -c pc_lookup.c -o pc_lookup.o
ar ruv libmpiP.a diag_msgs.o mpiP-hash.o glob.o wrappers.o wrappers_special.o mpiPi.o util
ack.o pc_lookup.o
ar: `u' modifier ignored since `D' is the default (see `U')
r - diag_msgs.o
r - mpiP-hash.o
r - glob.o
r - wrappers.o
r - wrappers_special.o
r - mpiPi.o
r - util.o
r - lookup.o
r - report.o
r - pcontrol.o
r - mpiP-API.o
r - record_stack.o
r - pc_lookup.o
ranlib libmpiP.a
```

```
erika@erikahp240G3:~/Música/mpiP-3.4$ make install
if [ -x libmpiP.so ] ; then \
  mkdir -p /projects/mpip/mpiP-3.4.1/install/lib ; \
  /usr/bin/install -c libmpiP.so /projects/mpip/mpiP-3.4.1/install/lib ; \
fi
mkdir -p /projects/mpip/mpiP-3.4.1/install/lib /projects/mpip/mpiP-3.4.1/install/share/doc/mpip
/usr/bin/install -c libmpiP.a /projects/mpip/mpiP-3.4.1/install/lib/libmpiP.a
/usr/bin/install: no se puede borrar '/projects/mpip/mpiP-3.4.1/install/lib/libmpiP.a': Permiso denegado
Makefile:244: recipe for target 'install' failed
make: *** [install] Error 1
```

 mpicc -g mpip_prueba.c -o prueba.exe -L/projects/mpip/mpiP-3.4.1/install/lib -lmpiP -lm -lbfd -lunwind -lm

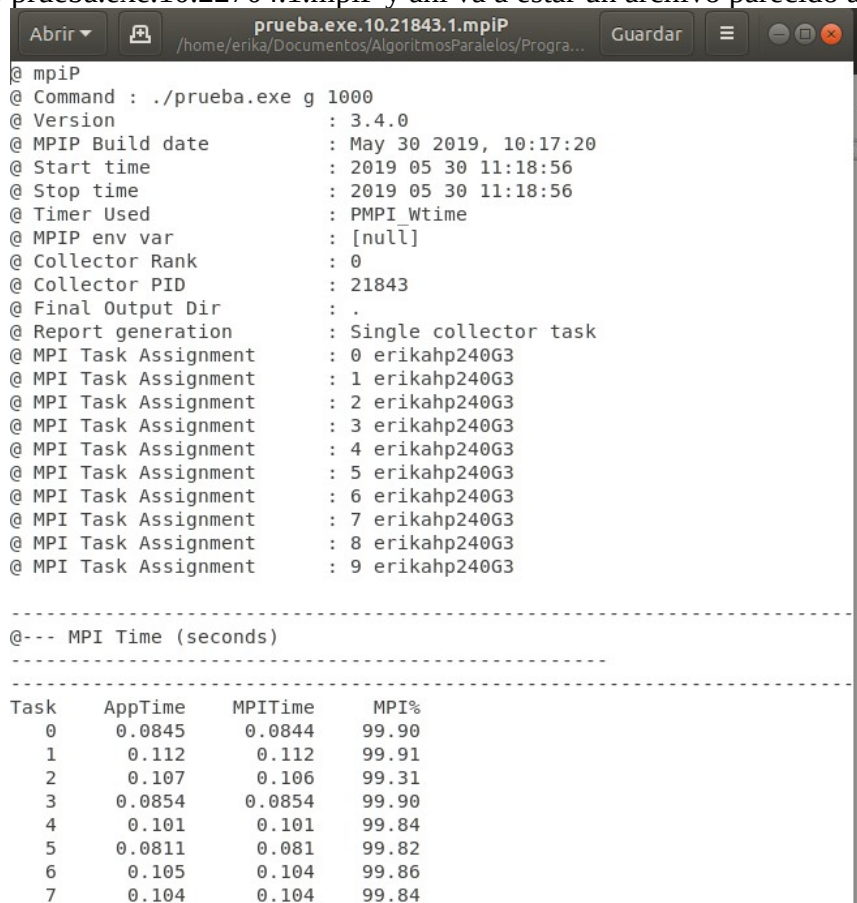Despues de ejecutar va a crear un archivo *.mpiP este lo abrimos.

/tutorial // export MPIP="-t 10.0"
Abrir el archivo prueba.exe.10.22704.1.mpiP y ahi va a estar un archivo parecido a esto