

DATE :- 02-08-24

```
rps@rps-virtual-machine:~/ptps$ cd ..
rps@rps-virtual-machine:~$
rps@rps-virtual-machine:~$ sudo -s
[sudo] password for rps:
Sorry, try again.
[sudo] password for rps:
root@rps-virtual-machine:/home/rps# uname -r
6.5.0-35-generic
root@rps-virtual-machine:/home/rps# wget https://www.kernel.org/pub/linux/kernel/v4.x/linux-5.14.3.tar.xz
--2024-08-02 11:56:16-- https://www.kernel.org/pub/linux/kernel/v4.x/linux-5.14.3.tar.xz
Resolving www.kernel.org (www.kernel.org)... 145.40.73.55, 2604:1380:40e1:4800::1
Connecting to www.kernel.org (www.kernel.org)[145.40.73.55]:443... connected.
HTTP request sent, awaiting response... 301 Moved Permanently
Location: https://mirrors.edge.kernel.org/pub/linux/kernel/v4.x/linux-5.14.3.tar.xz [following]
--2024-08-02 11:56:16-- https://mirrors.edge.kernel.org/pub/linux/kernel/v4.x/linux-5.14.3.tar.xz
Resolving mirrors.edge.kernel.org (mirrors.edge.kernel.org)... 147.75.80.249, 2604:1380:4601:e00::3
Connecting to mirrors.edge.kernel.org (mirrors.edge.kernel.org)[147.75.80.249]:443... connected.
HTTP request sent, awaiting response... 404 Not Found
2024-08-02 11:56:17 ERROR 404: Not Found.

root@rps-virtual-machine:/home/rps# sudo tar -xvf linux-5.14.3.tar.xz -C/usr/src/
tar: linux-5.14.3.tar.xz: Cannot open: No such file or directory
tar: Error is not recoverable: exiting now
root@rps-virtual-machine:/home/rps# cd /usr/src/linux-5.14.3/
bash: cd: /usr/src/linux-5.14.3/: No such file or directory
root@rps-virtual-machine:/home/rps# mkdir balancedp
root@rps-virtual-machine:/home/rps# cd balancedp
root@rps-virtual-machine:/home/rps/balancedp#
```

```
root@rps-virtual-machine:/home/rps# cd balancedp
root@rps-virtual-machine:/home/rps/balancedp# gedit balancedp.c

(gedit:924198): dconf-WARNING **: 12:02:42.718: failed to commit changes to dconf: Failed to execute child process "dbus-launch" (No such file or directory)

(gedit:924198): dconf-WARNING **: 12:02:42.732: failed to commit changes to dconf: Failed to execute child process "dbus-launch" (No such file or directory)

(gedit:924198): dconf-WARNING **: 12:02:43.134: failed to commit changes to dconf: Failed to execute child process "dbus-launch" (No such file or directory)

(gedit:924198): dconf-WARNING **: 12:02:43.135: failed to commit changes to dconf: Failed to execute child process "dbus-launch" (No such file or directory)

(gedit:924198): dconf-WARNING **: 12:02:43.135: failed to commit changes to dconf: Failed to execute child process "dbus-launch" (No such file or directory)

** (gedit:924198): WARNING **: 12:07:51.204: Set document metadata failed: Setting attribute metadata::gedit-spell-language not supported
** (gedit:924198): WARNING **: 12:07:51.204: Set document metadata failed: Setting attribute metadata::gedit-encoding not supported
** (gedit:924198): WARNING **: 12:07:59.735: Set document metadata failed: Setting attribute metadata::gedit-spell-language not supported
** (gedit:924198): WARNING **: 12:07:59.735: Set document metadata failed: Setting attribute metadata::gedit-encoding not supported
** (gedit:924198): WARNING **: 12:08:01.920: Set document metadata failed: Setting attribute metadata::gedit-position not supported
(gedit:924198): dconf-WARNING **: 12:08:01.956: failed to commit changes to dconf: Failed to execute child process "dbus-launch" (No such file or directory)
root@rps-virtual-machine:/home/rps/balancedp#
```

```
e or directory)
root@rps-virtual-machine:/home/rps/balancedp# gedit Makefile

(gedit:927168): dconf-WARNING **: 12:11:04.861: failed to commit changes to dconf: Failed to execute child process "dbus-launch" (No such file or directory)

(gedit:927168): dconf-WARNING **: 12:11:04.871: failed to commit changes to dconf: Failed to execute child process "dbus-launch" (No such file or directory)

(gedit:927168): dconf-WARNING **: 12:11:05.222: failed to commit changes to dconf: Failed to execute child process "dbus-launch" (No such file or directory)

(gedit:927168): dconf-WARNING **: 12:11:05.222: failed to commit changes to dconf: Failed to execute child process "dbus-launch" (No such file or directory)

(gedit:927168): dconf-WARNING **: 12:11:05.223: failed to commit changes to dconf: Failed to execute child process "dbus-launch" (No such file or directory)

** (gedit:927168): WARNING **: 12:14:23.483: Set document metadata failed: Setting attribute metadata::gedit-spell-language not supported
** (gedit:927168): WARNING **: 12:14:23.484: Set document metadata failed: Setting attribute metadata::gedit-encoding not supported
** (gedit:927168): WARNING **: 12:14:27.539: Set document metadata failed: Setting attribute metadata::gedit-spell-language not supported
** (gedit:927168): WARNING **: 12:14:27.540: Set document metadata failed: Setting attribute metadata::gedit-encoding not supported
** (gedit:927168): WARNING **: 12:15:00.668: Set document metadata failed: Setting attribute metadata::gedit-position not supported
(gedit:927168): dconf-WARNING **: 12:15:00.715: failed to commit changes to dconf: Failed to execute child process "dbus-launch" (No such file or directory)
root@rps-virtual-machine:/home/rps/balancedp#
```

```
root@rps-virtual-machine:/home/rps/balancedp# cd ../
root@rps-virtual-machine:/home/rps# gedit Makefile

(gedit:927552): dconf-WARNING **: 12:16:42.274: failed to commit changes to dconf: Failed to execute child process "dbus-launch" (No such file or directory)

(gedit:927552): dconf-WARNING **: 12:16:42.287: failed to commit changes to dconf: Failed to execute child process "dbus-launch" (No such file or directory)

(gedit:927552): dconf-WARNING **: 12:16:42.735: failed to commit changes to dconf: Failed to execute child process "dbus-launch" (No such file or directory)

(gedit:927552): dconf-WARNING **: 12:16:42.736: failed to commit changes to dconf: Failed to execute child process "dbus-launch" (No such file or directory)

(gedit:927552): dconf-WARNING **: 12:16:42.736: failed to commit changes to dconf: Failed to execute child process "dbus-launch" (No such file or directory)

** (gedit:927552): WARNING **: 12:19:46.542: Set document metadata failed: Setting attribute metadata::gedit-position not supported
(gedit:927552): dconf-WARNING **: 12:19:46.578: failed to commit changes to dconf: Failed to execute child process "dbus-launch" (No such file or directory)
root@rps-virtual-machine:/home/rps# vim Makefile
root@rps-virtual-machine:/home/rps#
```

```
root@rps-virtual-machine:/home/rps# gedit Makefile

(gedit:929584): dconf-WARNING **: 12:35:22.316: failed to commit changes to dconf: Failed to execute child process "dbus-launch" (No such file or directory)

(gedit:929584): dconf-WARNING **: 12:35:22.332: failed to commit changes to dconf: Failed to execute child process "dbus-launch" (No such file or directory)

(gedit:929584): dconf-WARNING **: 12:35:22.811: failed to commit changes to dconf: Failed to execute child process "dbus-launch" (No such file or directory)

(gedit:929584): dconf-WARNING **: 12:35:22.812: failed to commit changes to dconf: Failed to execute child process "dbus-launch" (No such file or directory)

(gedit:929584): dconf-WARNING **: 12:35:22.812: failed to commit changes to dconf: Failed to execute child process "dbus-launch" (No such file or directory)

** (gedit:929584): WARNING **: 12:41:25.518: Set document metadata failed: Setting attribute metadata::gedit-spell-language not supported
** (gedit:929584): WARNING **: 12:41:25.518: Set document metadata failed: Setting attribute metadata::gedit-encoding not supported
** (gedit:929584): WARNING **: 12:41:32.905: Set document metadata failed: Setting attribute metadata::gedit-position not supported
(gedit:929584): dconf-WARNING **: 12:41:32.950: failed to commit changes to dconf: Failed to execute child process "dbus-launch" (No such file or directory)
root@rps-virtual-machine:/home/rps#
```

```

core-y += kernel/ mm/ fs/ ipc/ security/ crypto/ block/ balancedp/
ash: syntax error near unexpected token `core-y'
oot@rps-virtual-machine:/home/rps# cd arch/x86/entry/syscalls/
ash: cd: arch/x86/entry/syscalls/: No such file or directory
oot@rps-virtual-machine:/home/rps# gedit syscall_64.tbl

gedit:931433): dconf-WARNING **: 13:00:08.991: failed to commit changes to dconf: Failed to execute child process "dbus-launch" (No such fil
or directory)

gedit:931433): dconf-WARNING **: 13:00:09.012: failed to commit changes to dconf: Failed to execute child process "dbus-launch" (No such fil
or directory)

gedit:931433): dconf-WARNING **: 13:00:09.499: failed to commit changes to dconf: Failed to execute child process "dbus-launch" (No such fil
or directory)

gedit:931433): dconf-WARNING **: 13:00:09.500: failed to commit changes to dconf: Failed to execute child process "dbus-launch" (No such fil
or directory)

gedit:931433): dconf-WARNING **: 13:00:09.501: failed to commit changes to dconf: Failed to execute child process "dbus-launch" (No such fil
or directory)

* (gedit:931433): WARNING **: 13:02:46.903: Set document metadata failed: Setting attribute metadata::gedit-spell-language not supported
* (gedit:931433): WARNING **: 13:02:46.903: Set document metadata failed: Setting attribute metadata::gedit-encoding not supported
* (gedit:931433): WARNING **: 13:03:03.545: Set document metadata failed: Setting attribute metadata::gedit-position not supported

gedit:931433): dconf-WARNING **: 13:03:03.596: failed to commit changes to dconf: Failed to execute child process "dbus-launch" (No such fil
or directory)
oot@rps-virtual-machine:/home/rps#

```

```

root@rps-virtual-machine:/home/rps# /usr/src/linux-5.14.3# cd /usr/src/linux-5.14.3/arch/x86/kernel/
bash: /usr/src/linux-5.14.3#: No such file or directory
root@rps-virtual-machine:/home/rps# /usr/src/linux-5.14.3# 333 64 balance __x64_sys_balancedp
bash: /usr/src/linux-5.14.3#: No such file or directory
root@rps-virtual-machine:/home/rps# /usr/src/linux-5.14.3# 548 64 balance __x64_sys_balancedp
bash: /usr/src/linux-5.14.3#: No such file or directory
root@rps-virtual-machine:/home/rps# ^C
root@rps-virtual-machine:/home/rps# ^C
root@rps-virtual-machine:/home/rps#
root@rps-virtual-machine:/home/rps# cd ..
root@rps-virtual-machine:/home# cd ..
root@rps-virtual-machine:/# cd ..
root@rps-virtual-machine:/# cd ..
root@rps-virtual-machine:/# cd /usr/src/linux-5.14.3/arch/x86/kernel/
bash: cd: /usr/src/linux-5.14.3/arch/x86/kernel/: No such file or directory
root@rps-virtual-machine:/# ls
bin  cdrom  etc  lib  lib64  lost+found  mnt  proc  run  snap  swapfile  tmp  var
boot  dev  home  lib32  libx32  media  opt  root  sbin  srv  sys  usr
root@rps-virtual-machine:/#

```

```

root@rps-virtual-machine:/# ls
bin  cdrom  etc  lib  lib64  lost+found  mnt  proc  run  snap  swapfile  tmp  var
boot  dev  home  lib32  libx32  media  opt  root  sbin  srv  sys  usr
root@rps-virtual-machine:/# cd ../../include/linux/
bash: cd: ../../include/linux/: No such file or directory
root@rps-virtual-machine:/# vim syscalls.h
root@rps-virtual-machine:/# sudo apt-get install gcc libncurses5-dev bison flex libssl-dev libelf-dev
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
gcc is already the newest version (4:11.2.0-1ubuntu1).
The following packages were automatically installed and are no longer required:
  libflashrom1 libftdi1-2 liblvm13 libwpe-1.0-1 libwpebackend-fdo-1.0-1
Use 'sudo apt autoremove' to remove them.
The following additional packages will be installed:
  libfl-dev libfl2 libncurses-dev libsigsegv2 m4 zlib1g-dev
Suggested packages:
  bison-doc flex-doc ncurses-doc libssl-doc m4-doc
The following NEW packages will be installed:
  bison flex libelf-dev libfl-dev libfl2 libncurses-dev libncurses5-dev libsigsegv2 libssl-dev m4 zlib1g-dev
0 upgraded, 11 newly installed, 0 to remove and 25 not upgraded.
Need to get 4,270 kB of archives.
After this operation, 19.9 MB of additional disk space will be used.
Do you want to continue? [Y/n]

```



```
Do you want to continue? [Y/n] y
Get:1 http://in.archive.ubuntu.com/ubuntu jammy/main amd64 libsigsegv2 amd64 2.13-1ubuntu3 [14.6 kB]
Get:2 http://in.archive.ubuntu.com/ubuntu jammy/main amd64 m4 amd64 1.4.18-5ubuntu2 [199 kB]
Get:3 http://in.archive.ubuntu.com/ubuntu jammy/main amd64 flex amd64 2.6.4-8build2 [307 kB]
Get:4 http://in.archive.ubuntu.com/ubuntu jammy/main amd64 bison amd64 2:3.8.2+dfsg-1build1 [748 kB]
Get:5 http://in.archive.ubuntu.com/ubuntu jammy-updates/main amd64 zlib1g-dev amd64 1:1.2.11.dfsg-2ubuntu9.2 [164 kB]
Get:6 http://in.archive.ubuntu.com/ubuntu jammy/main amd64 libelf-dev amd64 0.186-1build1 [64.4 kB]
Get:7 http://in.archive.ubuntu.com/ubuntu jammy/main amd64 libfl2 amd64 2.6.4-8build2 [10.7 kB]
Get:8 http://in.archive.ubuntu.com/ubuntu jammy/main amd64 libfl-dev amd64 2.6.4-8build2 [6,236 B]
Get:9 http://in.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libncurses-dev amd64 6.3-2ubuntu0.1 [381 kB]
Get:10 http://in.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libncurses5-dev amd64 6.3-2ubuntu0.1 [790 B]
Get:11 http://in.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libssl-dev amd64 3.0.2-0ubuntu1.17 [2,375 kB]
Fetched 4,270 kB in 2s (2,531 kB/s)
Selecting previously unselected package libsigsegv2:amd64.
(Reading database ... 213996 files and directories currently installed.)
Preparing to unpack .../00-libsigsegv2_2.13-1ubuntu3_amd64.deb ...
Unpacking libsigsegv2:amd64 (2.13-1ubuntu3) ...
Selecting previously unselected package m4.
Preparing to unpack .../01-m4_1.4.18-5ubuntu2_amd64.deb ...
Unpacking m4 (1.4.18-5ubuntu2) ...
Selecting previously unselected package flex.
Preparing to unpack .../02-flex_2.6.4-8build2_amd64.deb ...
Unpacking flex (2.6.4-8build2) ...
Selecting previously unselected package bison.
Preparing to unpack .../03-bison_2%3a3.8.2+dfsg-1build1_amd64.deb ...
Unpacking bison (2:3.8.2+dfsg-1build1) ...
Selecting previously unselected package zlib1g-dev:amd64.
Preparing to unpack .../04-zlib1g-dev_1%3a1.2.11.dfsg-2ubuntu9.2_amd64.deb ...
Unpacking zlib1g-dev:amd64 (1:1.2.11.dfsg-2ubuntu9.2) ...
Selecting previously unselected package libelf-dev:amd64.
Preparing to unpack .../05-libelf-dev_0.186-1build1_amd64.deb ...
```

```
Preparing to unpack .../04-zlib1g-dev_1%3a1.2.11.dfsg-2ubuntu9.2_amd64.deb ...
Unpacking zlib1g-dev:amd64 (1:1.2.11.dfsg-2ubuntu9.2) ...
Selecting previously unselected package libelf-dev:amd64.
Preparing to unpack .../05-libelf-dev_0.186-1build1_amd64.deb ...
Unpacking libelf-dev:amd64 (0.186-1build1) ...
Selecting previously unselected package libfl2:amd64.
Preparing to unpack .../06-libfl2_2.6.4-8build2_amd64.deb ...
Unpacking libfl2:amd64 (2.6.4-8build2) ...
Selecting previously unselected package libfl-dev:amd64.
Preparing to unpack .../07-libfl-dev_2.6.4-8build2_amd64.deb ...
Unpacking libfl-dev:amd64 (2.6.4-8build2) ...
Selecting previously unselected package libncurses-dev:amd64.
Preparing to unpack .../08-libncurses-dev_6.3-2ubuntu0.1_amd64.deb ...
Unpacking libncurses-dev:amd64 (6.3-2ubuntu0.1) ...
Selecting previously unselected package libncurses5-dev:amd64.
Preparing to unpack .../09-libncurses5-dev_6.3-2ubuntu0.1_amd64.deb ...
Unpacking libncurses5-dev:amd64 (6.3-2ubuntu0.1) ...
Selecting previously unselected package libssl-dev:amd64.
Preparing to unpack .../10-libssl-dev_3.0.2-0ubuntu1.17_amd64.deb ...
Unpacking libssl-dev:amd64 (3.0.2-0ubuntu1.17) ...
Setting up libncurses-dev:amd64 (6.3-2ubuntu0.1) ...
Setting up libsigsegv2:amd64 (2.13-1ubuntu3) ...
Setting up libssl-dev:amd64 (3.0.2-0ubuntu1.17) ...
Setting up libfl2:amd64 (2.6.4-8build2) ...
Setting up zlib1g-dev:amd64 (1:1.2.11.dfsg-2ubuntu9.2) ...
Setting up libncurses5-dev:amd64 (6.3-2ubuntu0.1) ...
Setting up m4 (1.4.18-5ubuntu2) ...
Setting up libelf-dev:amd64 (0.186-1build1) ...
Setting up bison (2:3.8.2+dfsg-1build1) ...
update-alternatives: using /usr/bin/bison.yacc to provide /usr/bin/yacc (yacc) in auto mode
Setting up flex (2.6.4-8build2) ...
Setting up libfl-dev:amd64 (2.6.4-8build2) ...
Processing triggers for libc-bin (2.35-0ubuntu3.8) ...
Processing triggers for man-db (2.10.2-1) ...
Processing triggers for install-info (6.8-4build1) ...
root@rps-virtual-machine:/#
```

```
Get:39 http://in.archive.ubuntu.com/ubuntu jammy-backports/main amd64 c-n-f Metadata [388 B]
Get:40 http://in.archive.ubuntu.com/ubuntu jammy-backports/universe i386 Packages [17.2 kB]
Get:41 http://in.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 Packages [28.8 kB]
Get:42 http://in.archive.ubuntu.com/ubuntu jammy-backports/universe Translation-en [16.5 kB]
Get:43 http://in.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 c-n-f Metadata [672 B]
Fetched 15.1 MB in 6s (2,494 kB/s)
```

^C

```
root@rps-virtual-machine:/usr/src/linux-5.14.3# cd /usr/src/linux-5.14.3
```

```
root@rps-virtual-machine:/usr/src/linux-5.14.3# sudo make menuconfig
HOSTCC scripts/basic/fixdep
```

```
*
* Unable to find the ncurses package.
* Install ncurses (ncurses-devel or libncurses-dev
* depending on your distribution).
*
* You may also need to install pkg-config to find the
* ncurses installed in a non-default location.
*
```

```
make[1]: *** [scripts/kconfig/Makefile:211: scripts/kconfig/mconf-cfg] Error 1
```

```
make: *** [Makefile:625: menuconfig] Error 2
```

```
root@rps-virtual-machine:/usr/src/linux-5.14.3# sudo make
```

```
***
*** Configuration file ".config" not found!
```

```
***
*** Please run some configurator (e.g. "make oldconfig" or
*** "make menuconfig" or "make xconfig").
***
```

```
Makefile:712: include/config/auto.conf.cmd: No such file or directory
```

```
make: *** [Makefile:721: .config] Error 1
```

```
root@rps-virtual-machine:/usr/src/linux-5.14.3# make
```

```
***
*** Configuration file ".config" not found!
```

```
***
*** Please run some configurator (e.g. "make oldconfig" or
*** "make menuconfig" or "make xconfig").
***
```

```
Makefile:712: include/config/auto.conf.cmd: No such file or directory
```

```
make: *** [Makefile:721: .config] Error 1
```

```
root@rps-virtual-machine:/usr/src/linux-5.14.3# make modules_install install
```

```
ERROR: Kernel configuration is invalid.
       include/generated/autoconf.h or include/config/auto.conf are missing.
       Run 'make oldconfig && make prepare' on kernel src to fix it.
```

```
Makefile:667: include/config/auto.conf: No such file or directory
```

```
make[1]: *** [Makefile:743: include/config/auto.conf] Error 1
```

```
make: *** [Makefile:351: __build_one_by_one] Error 2
```

```
root@rps-virtual-machine:/usr/src/linux-5.14.3# ls
```

```
arch  certs  CREDITS  Documentation  fs      init  Kbuild  kernel  LICENSES  Makefile  net  samples  security  syscalls.h  usr
block  COPYING  crypto  drivers      include  ipc  Kconfig  lib      MAINTAINERS  mm      README  scripts  sound      tools      virt
```

```
root@rps-virtual-machine:/usr/src/linux-5.14.3#
```

```
root@rps-virtual-machine:/usr/src/linux-5.14.3# cd ..
```

```
root@rps-virtual-machine:/usr/src# cd ..
```

```
root@rps-virtual-machine:/usr# cd ..
```

```
root@rps-virtual-machine:/# ls
```

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

```
root@rps-virtual-machine:/# cd linux-5.14.3/
```

```
bash: cd: linux-5.14.3/: No such file or directory
```

```
root@rps-virtual-machine:/# /usr/src/linux-5.14.3
```

```
bash: /usr/src/linux-5.14.3: No such file or directory
```

```
root@rps-virtual-machine:/# cd /usr/src/linux-5.14.3
```

```
root@rps-virtual-machine:/usr/src/linux-5.14.3# ls
```

```
arch  certs  CREDITS  Documentation  fs      init  Kbuild  kernel  LICENSES  Makefile  net  samples  security  syscalls.h  usr
```

```

arch  certs  CREDITS  Documentation  fs      init  Kbuild  kernel  LICENSES  Makefile  net  samples  security  syscalls.h  usr
block COPYING crypto  drivers      include ipc  Kconfig lib    MAINTAINERS  mm      README  scripts  sound     tools      virt
root@rps-virtual-machine:/usr/src/linux-5.14.3#
root@rps-virtual-machine:/usr/src/linux-5.14.3# cd ..
root@rps-virtual-machine:/usr/src# cd ..
root@rps-virtual-machine:/usr# cd ..
root@rps-virtual-machine:/# ls
bin  cdrom  etc  lib  lib64  lost+found  mnt  proc  run  snap  swapfile  tmp  var
boot  dev  home  lib32  libx32  media  opt  root  sbin  srv  sys      usr
root@rps-virtual-machine:/# cd linux-5.14.3/
bash: cd: linux-5.14.3/: No such file or directory
root@rps-virtual-machine:/# /usr/src/linux-5.14.3
bash: /usr/src/linux-5.14.3: No such file or directory
root@rps-virtual-machine:/# cd /usr/src/linux-5.14.3
root@rps-virtual-machine:/usr/src/linux-5.14.3# ls
arch  certs  CREDITS  Documentation  fs      init  Kbuild  kernel  LICENSES  Makefile  net  samples  security  syscalls.h  usr
block COPYING crypto  drivers      include ipc  Kconfig lib    MAINTAINERS  mm      README  scripts  sound     tools      virt
root@rps-virtual-machine:/usr/src/linux-5.14.3# touch test.c
root@rps-virtual-machine:/usr/src/linux-5.14.3# ls
arch  COPYING  Documentation  include  Kbuild  lib    Makefile  README  security  test.c  virt
block  CREDITS  drivers      init     Kconfig  LICENSES  mm      samples  sound     tools
certs  crypto  fs          ipc      kernel  MAINTAINERS  net     scripts  syscalls.h  usr
root@rps-virtual-machine:/usr/src/linux-5.14.3# vim test.c
root@rps-virtual-machine:/usr/src/linux-5.14.3# gcc test.c
test.c: In function 'main':
test.c:14:5: warning: implicit declaration of function 'gets'; did you mean 'fgets'? [-Wimplicit-function-declaration]
   14 |     gets(st);
      |     ^~~~~
      |     fgets
/usr/bin/ld: /tmp/ccwTb4S.o: in function 'main':
test.c:(.text+0x42): warning: the 'gets' function is dangerous and should not be used.
root@rps-virtual-machine:/usr/src/linux-5.14.3# ./a.out
Enter an arithmetic operation: (5+9)*8
Memory address of input (outside syscall): 0x7ffdfa027920
return value from syscall: -1
root@rps-virtual-machine:/usr/src/linux-5.14.3#

```

**SIMPLE MAKE FILE :-**



```
# Simple Makefile for a single C++ program

# Compiler
CXX = g++

# Compiler flags
CXXFLAGS = -Wall -g

# Target executable
TARGET = main

# Source files
SRCS = main.cpp

# Object files
OBJS = $(SRCS:.cpp=.o)

# Default target
all: $(TARGET)

# Linking
$(TARGET): $(OBJS)
    $(CXX) $(CXXFLAGS) -o $(TARGET) $(OBJS)

# Compiling
%.o: %.cpp
    $(CXX) $(CXXFLAGS) -c $< -o $@

# Clean up
clean:
    rm -f $(TARGET) $(OBJS)

~
~
```