

(1) Write a C program that uses standard I/O libraries to display the contents of text files. The program is compiled and linked by the make tool, which requires the generation of the.o file first, and then the generation of the executable file, and the function of deleting the intermediate file (.o) in the makefile file.

```
genshinya@DESKTOP-OT5R05C:~/task$ nvim makefile
genshinya@DESKTOP-OT5R05C:~/task$ make
gcc -c c1.c
gcc -o hello1 c1.o
genshinya@DESKTOP-OT5R05C:~/task$ nvim text.txt
genshinya@DESKTOP-OT5R05C:~/task$ ./hello1 text.txt
hello world!

genshinya@DESKTOP-OT5R05C:~/task$ make clean
rm -rf *.o
genshinya@DESKTOP-OT5R05C:~/task$
```

(2) Write a C program that displays all the file names in the current directory. The program is compiled and linked by the make tool, which requires the generation of the.o file first, and then the generation of the executable file, and the function of deleting the intermediate file (.o) in the makefile file.

```
genshinya@DESKTOP-OT5R05C:~/task$ nvim c2.c
genshinya@DESKTOP-OT5R05C:~/task$ make
gcc -c c2.c
gcc -o hello1 c2.o
genshinya@DESKTOP-OT5R05C:~/task$ ./hello1
Usage: ./hello1 <directory_path>
genshinya@DESKTOP-OT5R05C:~/task$ ./hello1 /home/genshinya
.config
script2.sh
张进涛2.txt
.profile
test.txt
.bash_logout
B22040515
script3.sh
exp1.sh
try
script4.sh
script5.sh
.viminfo
.motd_shown
.landscape
..
.
.sudo_as_admin_successful
task
.cache
B22040515.txt
script1.sh
.bash_history
.local
RepoLab
.bashrc
genshinya@DESKTOP-OT5R05C:~/task$
```

(3) Write a C program that changes the working directory of the current process. The program is compiled and linked by the make tool, which requires the generation of the.o file first, and then the generation of the executable file, and the function of deleting the intermediate file (.o) in the makefile file.

```
genshinya@DESKTOP-OT5R05C:~/task$ nvim c3.c
genshinya@DESKTOP-OT5R05C:~/task$ make
gcc -c c3.c
gcc -o hello1 c3.o
genshinya@DESKTOP-OT5R05C:~/task$ ./hello1
Usage: ./hello1 <new_directory>
genshinya@DESKTOP-OT5R05C:~/task$ ./hello1 /home
Working directory changed to: /home
genshinya@DESKTOP-OT5R05C:~/task$
```