

B22040602 张欣 我的虚拟机用户名为 bluedream.

Task 1

(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.

```
bluedream@bluedream-virtual-machine:~/Linux/experiment3$ touch c1.c
bluedream@bluedream-virtual-machine:~/Linux/experiment3$ touch makefile
bluedream@bluedream-virtual-machine:~/Linux/experiment3$ touch test
bluedream@bluedream-virtual-machine:~/Linux/experiment3$ gcc -c c1.c
bluedream@bluedream-virtual-machine:~/Linux/experiment3$ gcc -o hello1 c1.o
bluedream@bluedream-virtual-machine:~/Linux/experiment3$ la
c1.c c1.o hello1 makefile test.txt
bluedream@bluedream-virtual-machine:~/Linux/experiment3$ ./hello1 test.txt
hello world!
bluedream@bluedream-virtual-machine:~/Linux/experiment3$ rm -rf *.o
bluedream@bluedream-virtual-machine:~/Linux/experiment3$ la
c1.c hello1 makefile test.txt
```

Task 2

(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.

```
bluedream@bluedream-virtual-machine:~/Linux/experiment3$ touch c2.c
bluedream@bluedream-virtual-machine:~/Linux/experiment3$ gcc -c c2.c
bluedream@bluedream-virtual-machine:~/Linux/experiment3$ gcc -o hello1 c2.o
bluedream@bluedream-virtual-machine:~/Linux/experiment3$ ls
c1.c c2.c c2.o hello1 makefile test.txt
bluedream@bluedream-virtual-machine:~/Linux/experiment3$ rm -rf *.o
bluedream@bluedream-virtual-machine:~/Linux/experiment3$ ls
c1.c c2.c hello1 makefile test.txt
```

```
bluedream@bluedream-virtual-machine:~/Linux/experiment3$ pwd
/home/bluedream/Linux/experiment3
bluedream@bluedream-virtual-machine:~/Linux/experiment3$ ./hello1 /home/bluedream/Linux/experiment3
..
hello1
c2.c
makefile
.
test.txt
c1.c
```

Task 3

(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.

```
bluedream@bluedream-virtual-machine:~/Linux/experiment3$ touch c3.c
bluedream@bluedream-virtual-machine:~/Linux/experiment3$ gcc -c c3.c
bluedream@bluedream-virtual-machine:~/Linux/experiment3$ gcc -o hello1 c3.o
bluedream@bluedream-virtual-machine:~/Linux/experiment3$ ls
c1.c  c2.c  c3.c  c3.o  hello1  makefile  test.txt
bluedream@bluedream-virtual-machine:~/Linux/experiment3$ pwd
/home/bluedream/Linux/experiment3
bluedream@bluedream-virtual-machine:~/Linux/experiment3$ ./hello1 /home/bluedream/Linux/experiment3
/home/bluedream/Linux/experiment3
success
/home
bluedream@bluedream-virtual-machine:~/Linux/experiment3$ rm -rf *.o
bluedream@bluedream-virtual-machine:~/Linux/experiment3$ ls
c1.c  c2.c  c3.c  hello1  makefile  test.txt
```