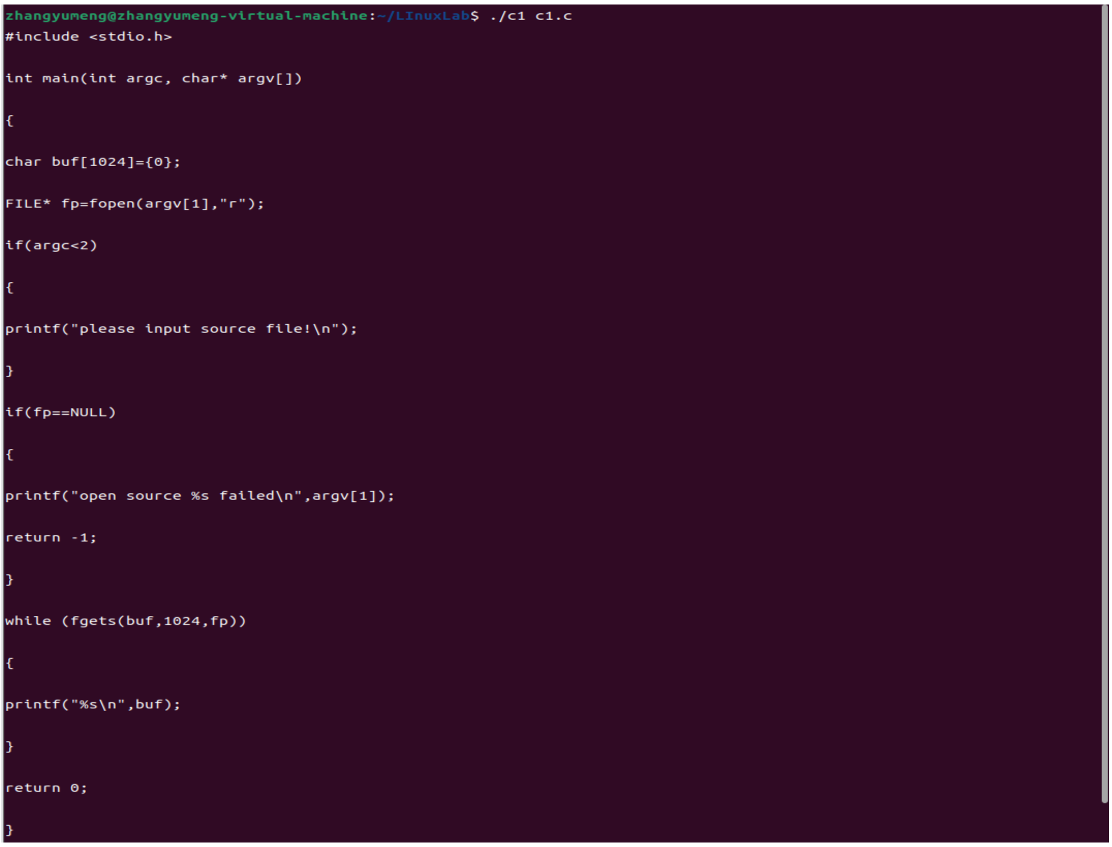
1. **Write a C program that uses standard I/O libraries to display the contents of text files. The program is compiled and linked by the make tool, which requires the generation of the.o file first, and then the generation of the executable file, and the function of deleting the intermediate file (.o)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

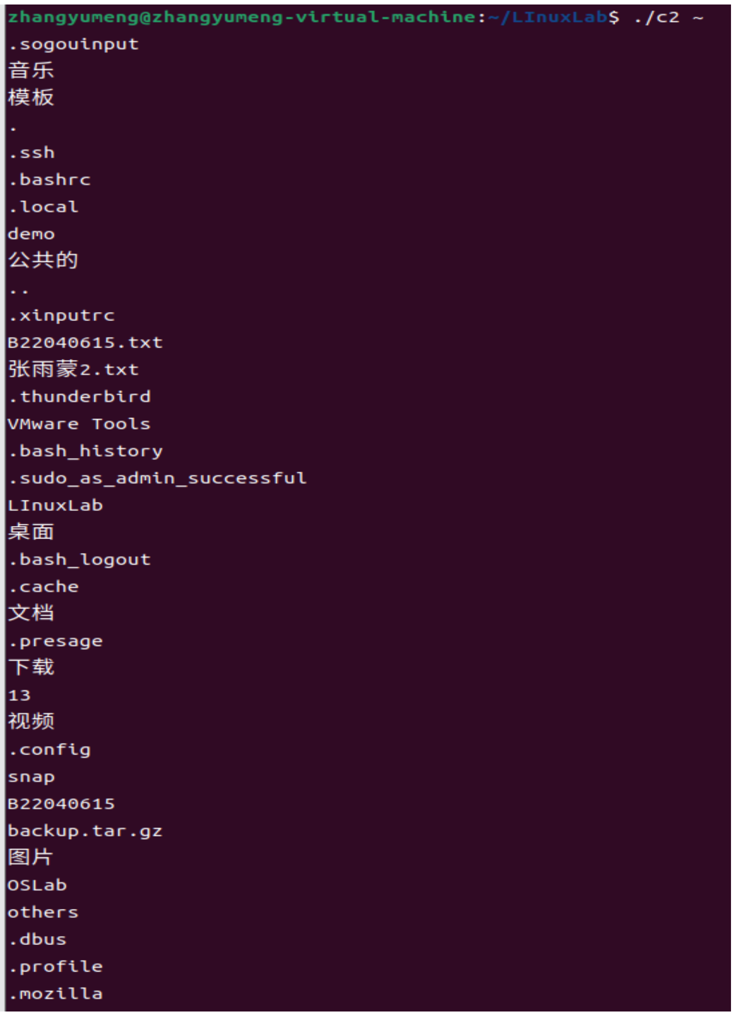
```
#include <stdio.h>
int main(int argc, char* argv[])
{
    char buf[1024]={0};
    FILE* fp=fopen(argv[1],"r");
    if(argc<2)
    {
        printf("please input source file!\n");
    }
        if(fp==NULL)
        {
            printf("open source %s failed\n",argv[1]);
            return -1;
        }
        while (fgets(buf,1024,fp))
        {
            printf("%s\n",buf);
        }
  return 0;
}
```



```
zhangyumeng@zhangyumeng-virtual-machine:~/LInuxLab$ ./c1 c1.c
#include <stdio.h>

int main(int argc, char* argv[])

{

char buf[1024]={0};

FILE* fp=fopen(argv[1],"r");

if(argc<2)

{

printf("please input source file!\n");

}

if(fp==NULL)

{

printf("open source %s failed\n",argv[1]);

return -1;

}

while (fgets(buf,1024,fp))

{

printf("%s\n",buf);

}

return 0;

}
```

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.**

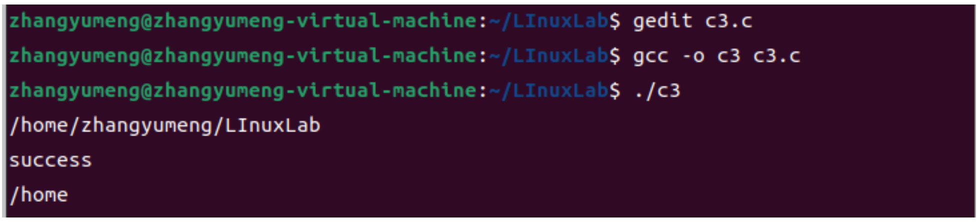
```
#include<stdio.h>
#include<dirent.h>
#include<sys/types.h>
int main(int argc,char* argv[])
{
    DIR* dirp;
    struct dirent* direntp;
    if ((dirp = opendir(argv[1])) == NULL) {
        printf("error\n");
    //     exit(1);
    }
    while ((direntp = readdir(dirp)) != NULL)
        printf("%s\n", direntp->d_name);
    closedir(dirp);
    // exit(0);
}
```



```
zhangyumeng@zhangyumeng-virtual-machine:~/LInuxLab$ ./c2 ~
.sogouinput
音乐
模板
.
.ssh
.bashrc
.local
demo
公共的
..
.xinputrc
B22040615.txt
张雨蒙2.txt
.thunderbird
VMware Tools
.bash_history
.sudo_as_admin_successful
LInuxLab
桌面
.bash_logout
.cache
文档
.presage
下载
13
视频
.config
snap
B22040615
backup.tar.gz
图片
OSLab
others
.dbus
.profile
.mozilla
```

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.**

```
#include <stdio.h>
#include <stdlib.h>
#include <unistd.h>
int main(){
  char buf[1024] = {0};
  char buf2[1024]={0};
  getcwd(buf, 1024);
  printf("%s\n", buf);
  if(chdir("/home")<0){
        printf("error\n");
  }
  else
  {
        printf("success\n");
  }
  getcwd(buf2,1024);
  printf("%s\n",buf2);
  return 0;
}
```



```
zhangyumeng@zhangyumeng-virtual-machine:~/LInuxLab$ gedit c3.c
zhangyumeng@zhangyumeng-virtual-machine:~/LInuxLab$ gcc -o c3 c3.c
zhangyumeng@zhangyumeng-virtual-machine:~/LInuxLab$ ./c3
/home/zhangyumeng/LInuxLab
success
/home
```