(1) Task 1

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;
}
```

Make1:

```
hello1:c1.o
  gcc -o hello1 c1.o
c1.o:c1.c
  gcc -c c1.c
clean:
  rm -rf *.o
```

```
cf@cf-virtual-machine:~/Linux/Experiment_3$ make -f make1
gcc -c c1.c
gcc -o hello1 c1.o
cf@cf-virtual-machine:~/Linux/Experiment_3$ ./hello1
please input source file!
open source (null) failed
```

(1) Task 2

C2.c:

```
#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);
}
Make1:
hello2:c2.o
  gcc -o hello1 c2.o
c2.o:c2.c
  gcc -c c2.c
clean:
  rm -rf *.o
```

```
cf@cf-virtual-machine:~/Linux/Experiment_3$ vim c2.c
cf@cf-virtual-machine:~/Linux/Experiment_3$ make -f make2
gcc -c c2.c
gcc -o hello1 c2.o
cf@cf-virtual-machine:~/Linux/Experiment_3$ ./hello1
段错误 （核心已转储）
```

(1) Task 3

C3.c:

```
#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;
}
Make3:
hello3:c3.o
  gcc -o hello1 c3.o
c3.o:c3.c
  gcc -c c3.c
clean:
  rm -rf *.o
```

```
cf@cf-virtual-machine:~/Linux/Experiment_3$ make -f make3
gcc -c c3.c
gcc -o hello1 c3.o
cf@cf-virtual-machine:~/Linux/Experiment_3$ ./hello1
/home/cf/Linux/Experiment_3
success
/home
```