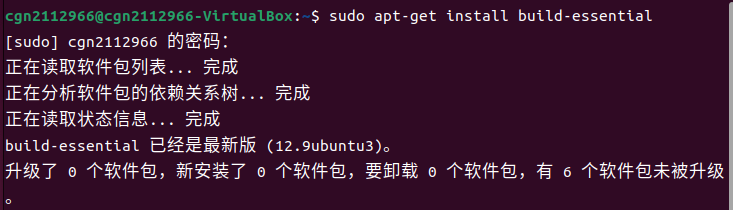
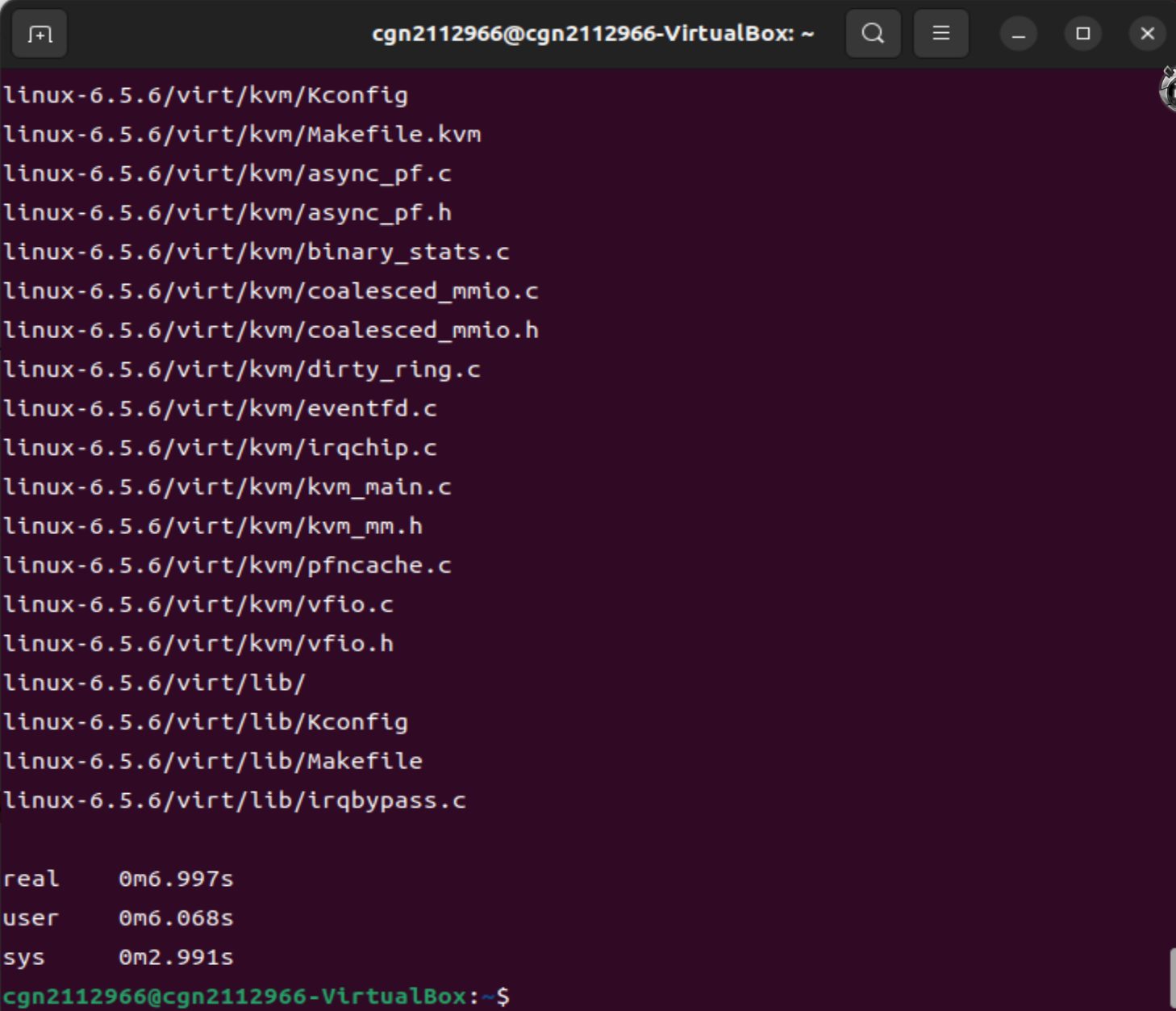
1.sudo apt-get install build-essential



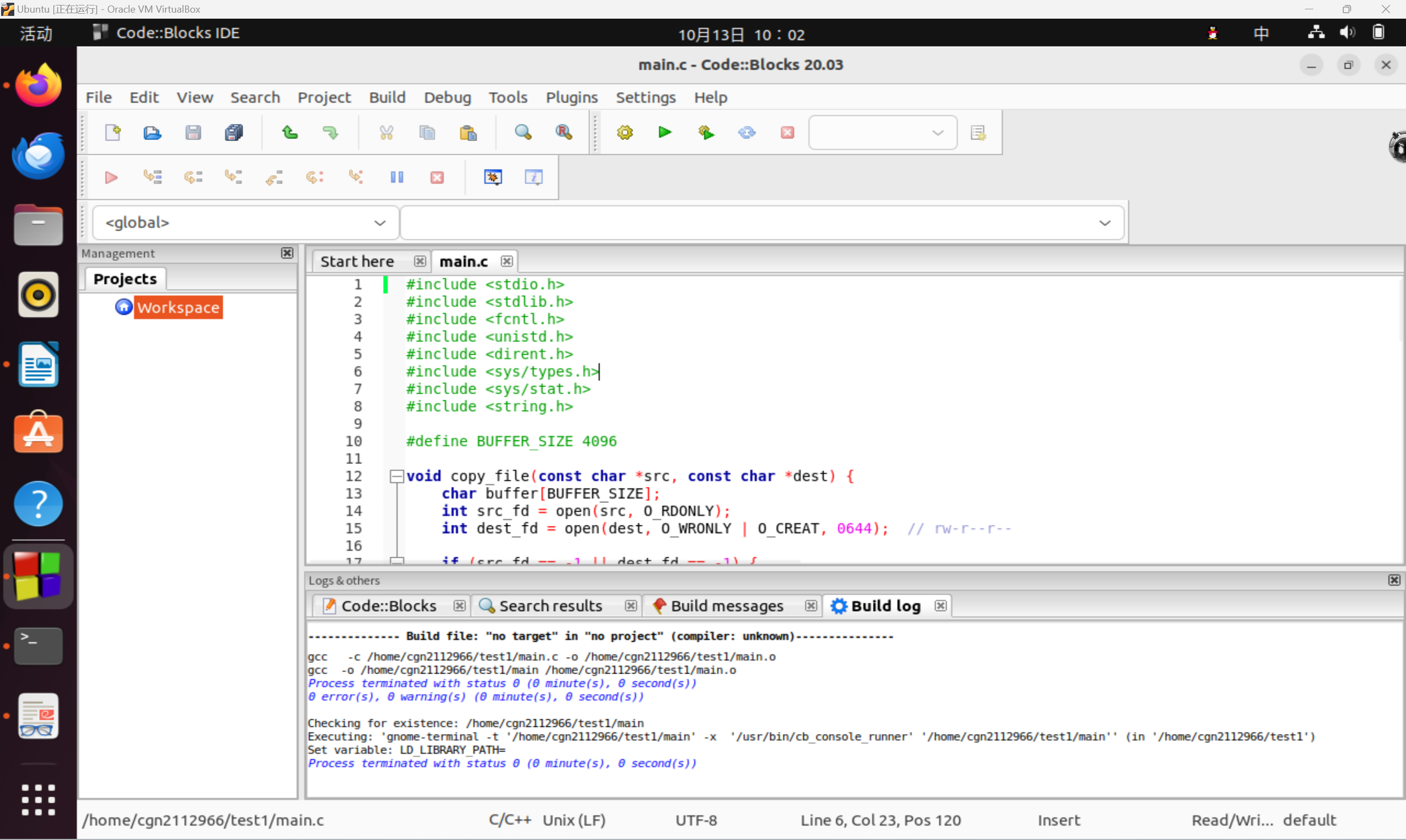
2.sudo apt-get install codeblocks 下载codeblocks



**3.解压压缩包,计算时间**



1. 开始在codeblock进行编译



1. 代码以及分析

导入所需的包

#include <stdio.h>

#include <stdlib.h>

#include <fcntl.h>

#include <unistd.h>

#include <dirent.h>

#include <sys/types.h>

#include <sys/stat.h>

#include <string.h>

#define BUFFER\_SIZE 4096

文件的拷贝

void copy\_file(const char \*src, const char \*src2) {

char buffer[BUFFER\_SIZE];

int src\_fd = open(src, O\_RDONLY);

int src2\_fd = open(src2, O\_WRONLY | O\_CREAT, 0644);

if (src\_fd == -1 || src2\_fd == -1) {

perror("文件打开失败");

exit(1);

}

ssize\_t bytes\_read;

while ((bytes\_read = read(src\_fd, buffer, sizeof(buffer))) > 0) {

write(src2\_fd, buffer, bytes\_read);

}

close(src\_fd);

close(src2\_fd);

}

文件夹的拷贝

void copy\_directory(const char \*src, const char \*dest) {

DIR \*dir = opendir(src);

if (dir == NULL) {

perror("打开文件夹失败");

exit(1);

}

mkdir(dest, 0755); // rwxr-xr-x

struct dirent \*entry;

while ((entry = readdir(dir)) != NULL) {

char src\_path[512];

char dest\_path[512];

if (strcmp(entry->d\_name, ".") == 0 || strcmp(entry->d\_name, "..") == 0) {

continue;

}

snprintf(src\_path, sizeof(src\_path), "%s/%s", src, entry->d\_name);

snprintf(dest\_path, sizeof(dest\_path), "%s/%s", dest, entry->d\_name);

在这里进行递归拷贝，如果遇到文件就继续执行copy\_directory

if (entry->d\_type == DT\_DIR) {

copy\_directory(src\_path, dest\_path);

} else {

copy\_file(src\_path, dest\_path);

}

}

closedir(dir);

}

int main() {

copy\_directory("../linux-6.5.6", "../linux-6.5.6bak");

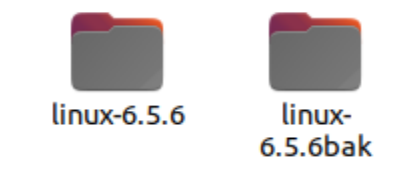
printf("复制文件夹成功");

return 0;

}

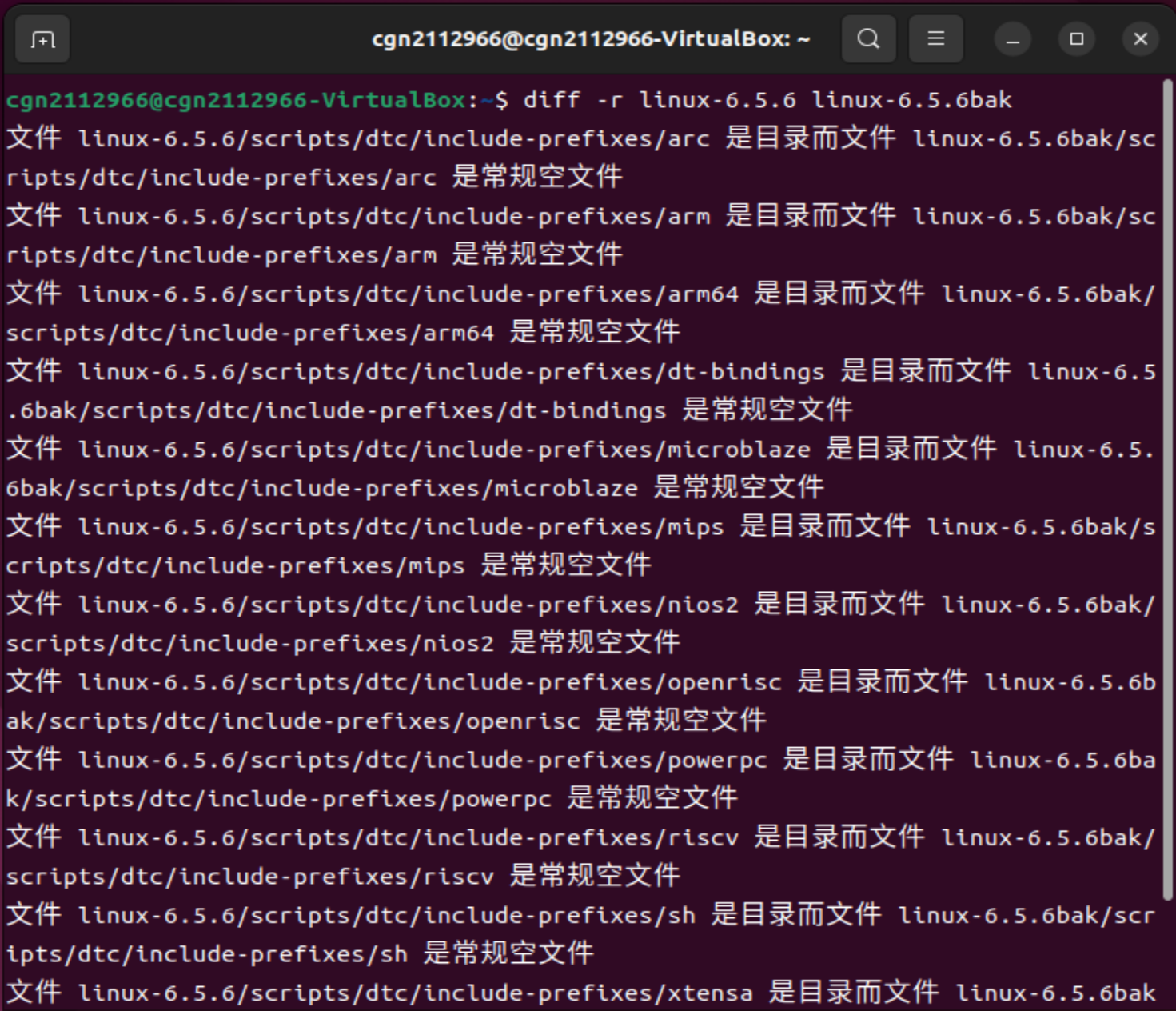
1. 代码开始

编译c程序获得可执行文件，执行文件



查看文件夹，复制成功

进行文件夹对比



发现问题，linux-6.5.6/scripts/dtc/include-prefixes文件夹下面的文件没有办法复制，经过分析，该文件下面是符号链接文件，复制不成功，目前找不到解决方法。

心得体会：学会了怎么用C语言进行文件的拷贝，受益匪浅。