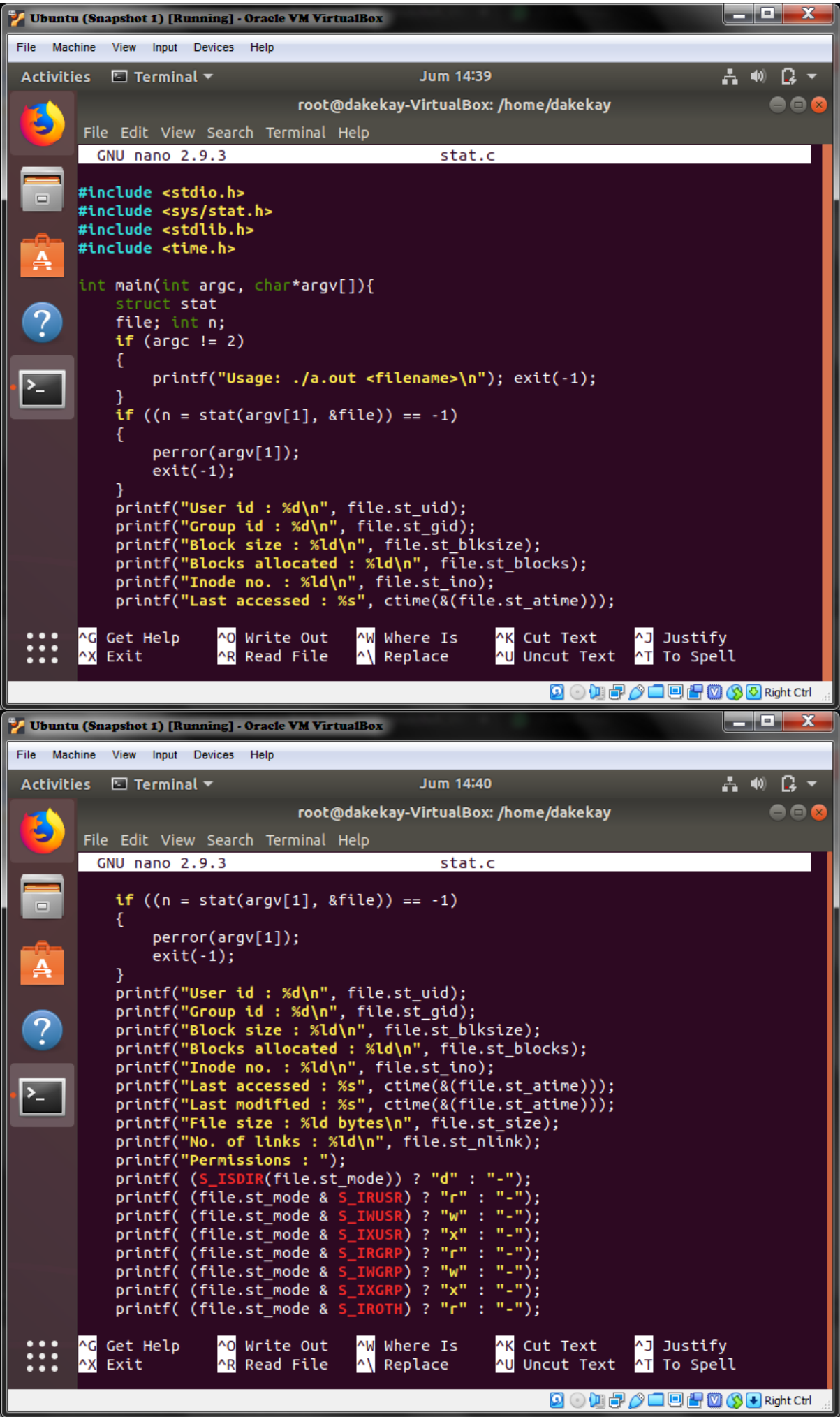


Praktikum Sistem Operasi Modul 8

1. File stat.c



Ubuntu (Snapshot 1) [Running] - Oracle VM VirtualBox

File Machine View Input Devices Help

Activities Terminal Jun 14:41

root@dakekay-VirtualBox: /home/dakekay

File Edit View Search Terminal Help

GNU nano 2.9.3 stat.c

```
printf("File size : %ld bytes\n", file.st_size);
printf("No. of links : %ld\n", file.st_nlink);
printf("Permissions : ");
printf( (S_ISDIR(file.st_mode)) ? "d" : "-");
printf( (file.st_mode & S_IRUSR) ? "r" : "-");
printf( (file.st_mode & S_IWUSR) ? "w" : "-");
printf( (file.st_mode & S_IXUSR) ? "x" : "-");
printf( (file.st_mode & S_IRGRP) ? "r" : "-");
printf( (file.st_mode & S_IWGRP) ? "w" : "-");
printf( (file.st_mode & S_IXGRP) ? "x" : "-");
printf( (file.st_mode & S_IROTH) ? "r" : "-");
printf( (file.st_mode & S_IWOTH) ? "w" : "-");
printf( (file.st_mode & S_IXOTH) ? "x" : "-");
printf("\n");
if(file.st_mode & S_IFREG)
{
    printf("File type : Regular\n");
}
if(file.st_mode & S_IFDIR)
{
    printf("File type : Directory\n");
}
}
```

Get Help Write Out Where Is Cut Text Justify  
Exit Read File Replace Uncut Text To Spell

Ubuntu (Snapshot 1) [Running] - Oracle VM VirtualBox

File Machine View Input Devices Help

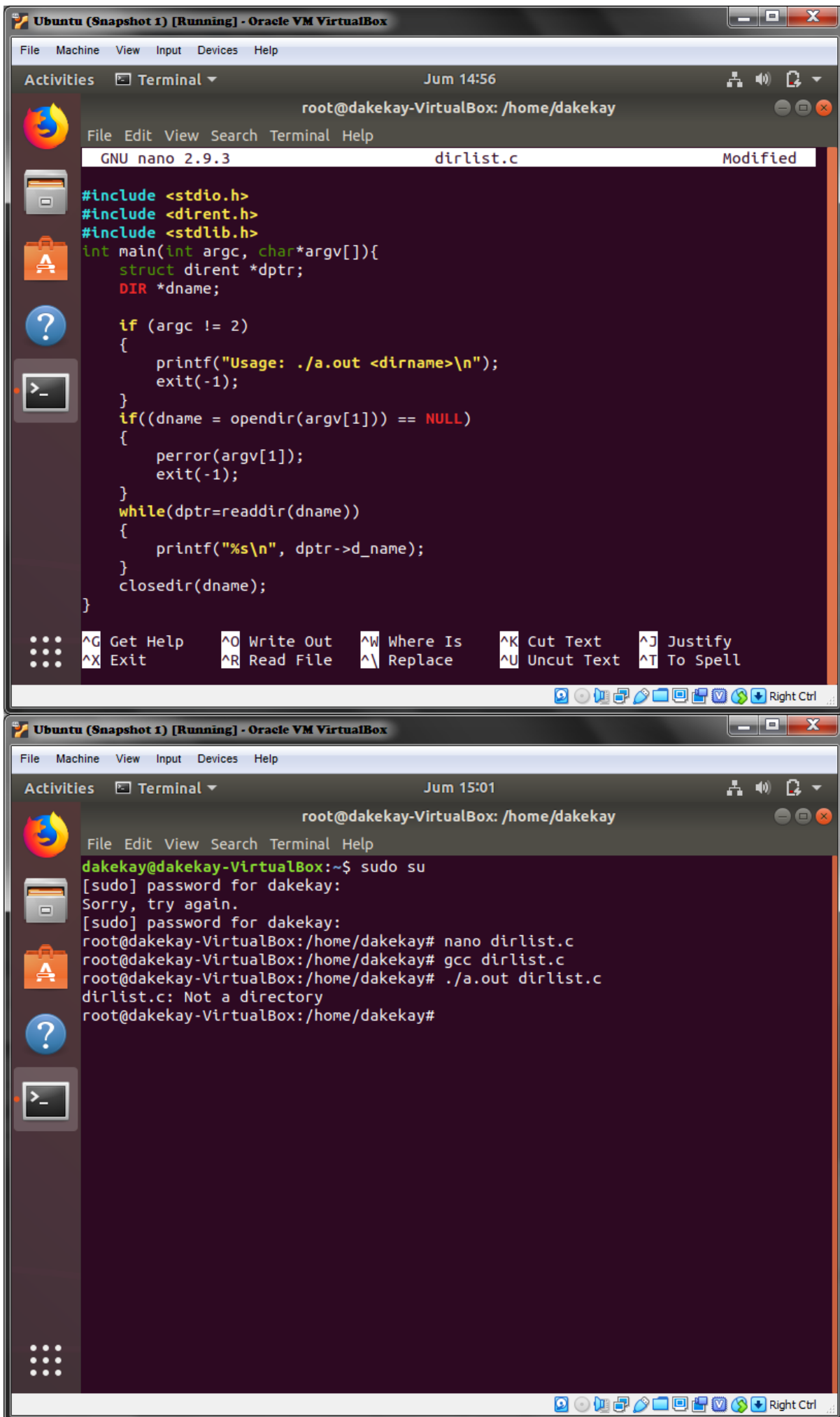
Activities Terminal Jun 14:44

root@dakekay-VirtualBox: /home/dakekay

File Edit View Search Terminal Help

```
dakekay@dakekay-VirtualBox:~$ sudo su
[sudo] password for dakekay:
root@dakekay-VirtualBox:/home/dakekay# nano stat.c
root@dakekay-VirtualBox:/home/dakekay# gcc stat.c
root@dakekay-VirtualBox:/home/dakekay# ./a.out stat.c
User id : 0
Group id : 999
Block size : 4096
Blocks allocated : 8
Inode no. : 409286
Last accessed : Fri Nov 29 14:29:14 2019
Last modified : Fri Nov 29 14:29:14 2019
File size : 1569 bytes
No. of links : 1
Permissions : -rw-r--r--
File type : Regular
root@dakekay-VirtualBox:/home/dakekay#
```

## 2. File dirlist.c



The image shows two screenshots of a VirtualBox terminal window running Ubuntu. The top screenshot shows the creation of a C program named `dirlist.c` using the `nano` editor. The program is designed to list the contents of a directory specified as an argument. The bottom screenshot shows the execution of the program after compilation with `gcc`. The user attempts to run the program with `./a.out dirlist.c`, but receives an error message: `dirlist.c: Not a directory`.

```
root@dakekay-VirtualBox: /home/dakekay
GNU nano 2.9.3 dirlist.c Modified

#include <stdio.h>
#include <dirent.h>
#include <stdlib.h>
int main(int argc, char*argv[]){
    struct dirent *dptr;
    DIR *dname;

    if (argc != 2)
    {
        printf("Usage: ./a.out <dirname>\n");
        exit(-1);
    }
    if((dname = opendir(argv[1])) == NULL)
    {
        perror(argv[1]);
        exit(-1);
    }
    while(dptr=readdir(dname))
    {
        printf("%s\n", dptr->d_name);
    }
    closedir(dname);
}

^G Get Help      ^O Write Out    ^W Where Is     ^K Cut Text     ^J Justify
^X Exit          ^R Read File    ^\ Replace      ^U Uncut Text   ^T To Spell
```

```
root@dakekay-VirtualBox: /home/dakekay
File Edit View Search Terminal Help
dakekay@dakekay-VirtualBox:~$ sudo su
[sudo] password for dakekay:
Sorry, try again.
[sudo] password for dakekay:
root@dakekay-VirtualBox:/home/dakekay# nano dirlist.c
root@dakekay-VirtualBox:/home/dakekay# gcc dirlist.c
root@dakekay-VirtualBox:/home/dakekay# ./a.out dirlist.c
dirlist.c: Not a directory
root@dakekay-VirtualBox:/home/dakekay#
```