

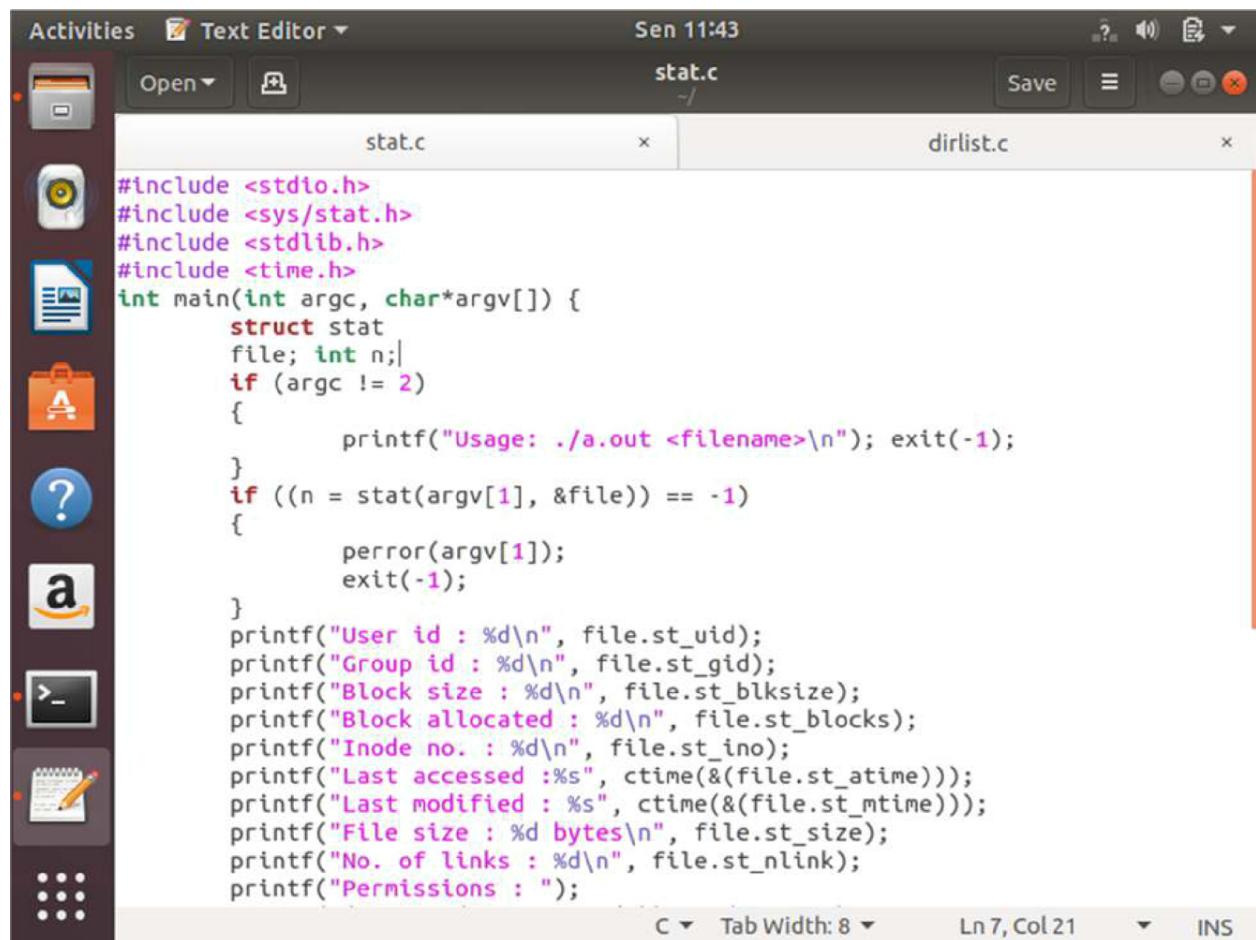
Modul 8

NIM : L200180126

Nama : Damar Fatika Sari

Tanggal Praktikum : 26 November 2019

Stat.c



The screenshot shows a Linux desktop environment with a text editor window open. The window title is "stat.c". The code in the editor is as follows:

```
#include <stdio.h>
#include <sys/stat.h>
#include <stdlib.h>
#include <time.h>
int main(int argc, char*argv[])
{
    struct stat
        file; int n;
    if (argc != 2)
    {
        printf("Usage: ./a.out <filename>\n"); exit(-1);
    }
    if ((n = stat(argv[1], &file)) == -1)
    {
        perror(argv[1]);
        exit(-1);
    }
    printf("User id : %d\n", file.st_uid);
    printf("Group id : %d\n", file.st_gid);
    printf("Block size : %d\n", file.st_blksize);
    printf("Block allocated : %d\n", file.st_blocks);
    printf("Inode no. : %d\n", file.st_ino);
    printf("Last accessed :%s", ctime(&(file.st_atime)));
    printf("Last modified : %s", ctime(&(file.st_mtime)));
    printf("File size : %d bytes\n", file.st_size);
    printf("No. of links : %d\n", file.st_nlink);
    printf("Permissions : ");
}
```

Activities Text Editor Sen 11:43

Open Save stat.c dirlist.c

```
stat.c: stat.c
printf("User id : %d\n", file.st_uid);
printf("Group id : %d\n", file.st_gid);
printf("Block size : %d\n", file.st_blksize);
printf("Block allocated : %d\n", file.st_blocks);
printf("Inode no. : %d\n", file.st_ino);
printf("Last accessed : %s", ctime(&(file.st_atime)));
printf("Last modified : %s", ctime(&(file.st_mtime)));
printf("File size : %d bytes\n", file.st_size);
printf("No. of links : %d\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");
}
```

C Tab Width: 8 Ln 7, Col 21 INS

Program di compile

Activities Terminal Sen 11:41

root@rohana-VirtualBox: /home/rohana

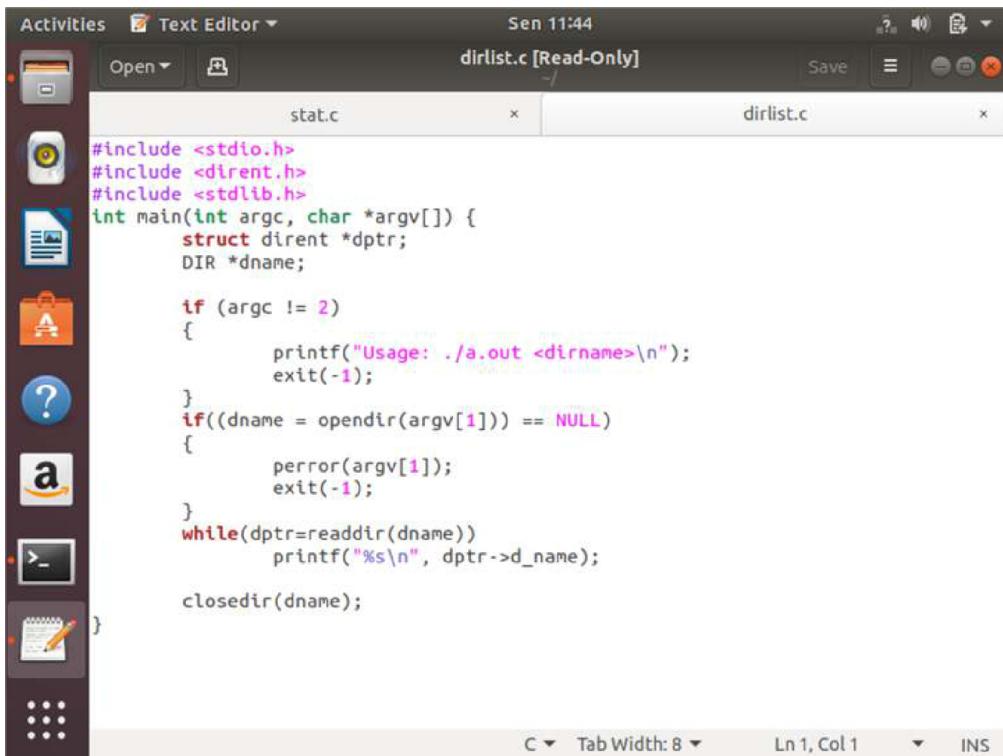
```
File Edit View Search Terminal Tabs Help
root@rohana-VirtualBox: /home/rohana x root@rohana-VirtualBox: /home/rohana x
2 has type '__ino_t {aka long unsigned int}' [-Wformat=]
printf("Inode no. : %d\n", file.st_ino);

stat.c:24:23: warning: format '%d' expects argument of type 'int', but argument
2 has type '__off_t {aka long int}' [-Wformat=]
printf("File size : %d bytes\n", file.st_size);

stat.c:25:26: warning: format '%d' expects argument of type 'int', but argument
2 has type '__nlink_t {aka long unsigned int}' [-Wformat=]
printf("No. of links : %d\n", file.st_nlink);

root@rohana-VirtualBox:/home/rohana# ./a.out stat.c
User id : 1000
Group id : 1000
Block size : 4096
Block allocated : 8
Inode no. : 527348
Last accessed : Mon Dec 2 11:01:00 2019
Last modified : Mon Dec 2 11:00:43 2019
File size : 1368 bytes
No. of links : 1
Permissions : -rw-r--r--
File type : Regular
root@rohana-VirtualBox:/home/rohana#
```

Dirlist.c



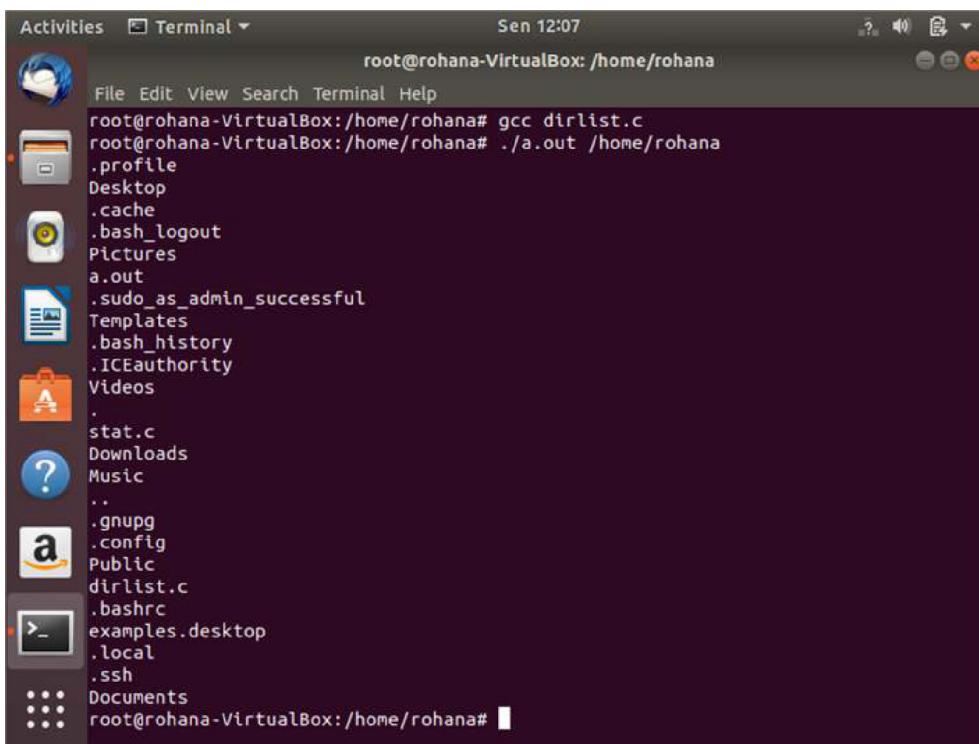
The screenshot shows a Linux desktop environment with a window titled "Text Editor". The window contains the source code for a C program named "dirlist.c". The code uses the `dirent.h` library to list files in a directory. It includes headers for `stdio.h`, `dirent.h`, and `stdlib.h`. It defines a main function that takes an argument and prints usage if it's not provided. It then opens a directory and reads its contents using `readdir` until `NULL` is returned.

```
#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);
}
```

Program di compile



The screenshot shows a terminal window with the title "Terminal". The terminal is running as root on a VirtualBox host. It shows the command `gcc dirlist.c` being run to compile the program. Then, the command `./a.out /home/rohana` is run to execute the compiled program, which lists the contents of the "/home/rohana" directory.

```
File Edit View Search Terminal Help
root@rohana-VirtualBox:/home/rohana# gcc dirlist.c
root@rohana-VirtualBox:/home/rohana# ./a.out /home/rohana
.profile
Desktop
.cache
.bash_logout
Pictures
a.out
.sudo_as_admin_successful
Templates
.bash_history
.ICEauthority
Videos
.
stat.c
Downloads
Music
..
.gnupg
.config
Public
dirlist.c
.bashrc
examples.desktop
.local
.ssh
Documents
root@rohana-VirtualBox:/home/rohana#
```