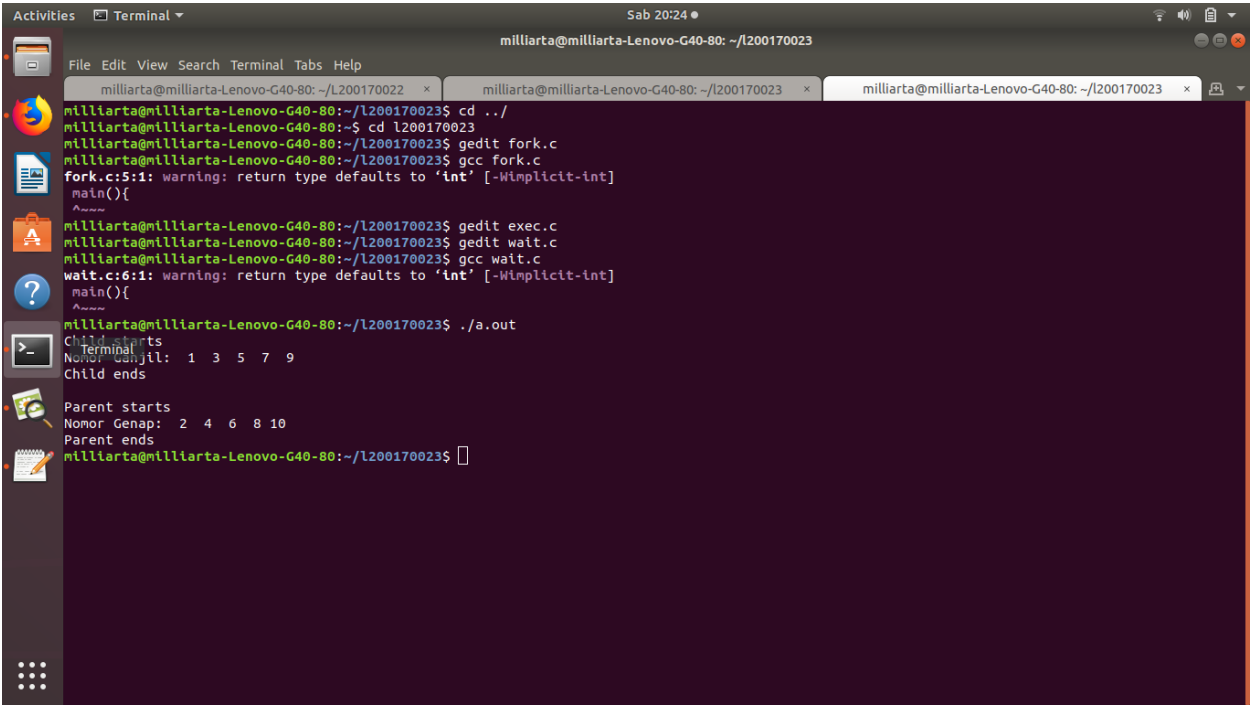
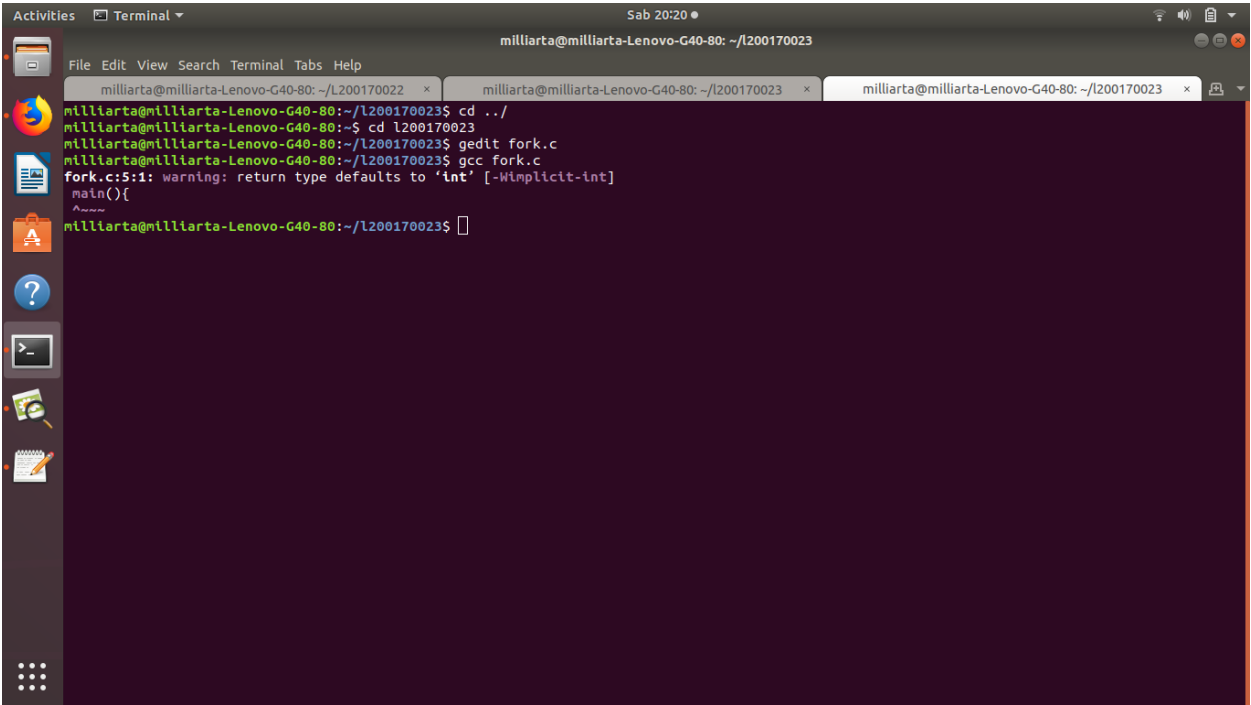


LAPORAN PRAKTIKUM

SISTEM OPERASI

Nama : Ilham Athur Bayu W
NIM : L200170023
Kelas : B

MODUL 8



```
milliarta@milliarta-Lenovo-G40-80: ~/l200170023
milliarta@milliarta-Lenovo-G40-80:~/l200170022 x milliarta@milliarta-Lenovo-G40-80:~/l200170023 x milliarta@milliarta-Lenovo-G40-80:~/l200170023 x
milliarta@milliarta-Lenovo-G40-80:~/l200170023$ gedit fork.c
milliarta@milliarta-Lenovo-G40-80:~/l200170023$ gcc fork.c
fork.c:5:1: warning: return type defaults to 'int' [-Wimplicit-int]
main(){
    ~~~~~
milliarta@milliarta-Lenovo-G40-80:~/l200170023$ gedit exec.c
milliarta@milliarta-Lenovo-G40-80:~/l200170023$ gedit wait.c
milliarta@milliarta-Lenovo-G40-80:~/l200170023$ gcc wait.c
wait.c:6:1: warning: return type defaults to 'int' [-Wimplicit-int]
main(){
    ~~~~~
milliarta@milliarta-Lenovo-G40-80:~/l200170023$ ./a.out
Child starts
Nomor Ganjil: 1 3 5 7 9
Child ends

Parent starts
Nomor Genap: 2 4 6 8 10
Parent ends
milliarta@milliarta-Lenovo-G40-80:~/l200170023$ gedit exec.c
milliarta@milliarta-Lenovo-G40-80:~/l200170023$ gcc exec.c
exec.c:5:1: warning: return type defaults to 'int' [-Wimplicit-int]
main(int argc, char*argv[]){
    ~~~~~
exec.c: In function 'main':
exec.c:23:3: warning: missing sentinel in function call [-Wformat=]
    i = execl(argv[1], argv[2], 0);
    ^
exec.c:30:3: warning: implicit declaration of function 'wait'; did you mean 'main'? [-Wimplicit-function-declaration]
    wait(NULL);
    ~~~~~
    main
exec.c:16:2: warning: switch condition has boolean value [-Wswitch-bool]
    switch(pid == fork())
    ~~~~~
milliarta@milliarta-Lenovo-G40-80:~/l200170023$
```

```
milliarta@milliarta-Lenovo-G40-80: ~/l200170023
milliarta@milliarta-Lenovo-G40-80:~/l200170022 x milliarta@milliarta-Lenovo-G40-80:~/l200170023 x milliarta@milliarta-Lenovo-G40-80:~/l200170023 x
milliarta@milliarta-Lenovo-G40-80:~/l200170023$ gedit exec.c
milliarta@milliarta-Lenovo-G40-80:~/l200170023$ gedit wait.c
milliarta@milliarta-Lenovo-G40-80:~/l200170023$ gcc wait.c
wait.c:6:1: warning: return type defaults to 'int' [-Wimplicit-int]
main(){
    ~~~~~
milliarta@milliarta-Lenovo-G40-80:~/l200170023$ ./a.out
Child starts
Nomor Ganjil: 1 3 5 7 9
Child ends

Parent starts
Nomor Genap: 2 4 6 8 10
Parent ends
milliarta@milliarta-Lenovo-G40-80:~/l200170023$ gedit exec.c
milliarta@milliarta-Lenovo-G40-80:~/l200170023$ gcc exec.c
exec.c:5:1: warning: return type defaults to 'int' [-Wimplicit-int]
main(int argc, char*argv[]){
    ~~~~~
exec.c: In function 'main':
exec.c:23:3: warning: missing sentinel in function call [-Wformat=]
    i = execl(argv[1], argv[2], 0);
    ^
exec.c:30:3: warning: implicit declaration of function 'wait'; did you mean 'main'? [-Wimplicit-function-declaration]
    wait(NULL);
    ~~~~~
    main
exec.c:16:2: warning: switch condition has boolean value [-Wswitch-bool]
    switch(pid == fork())
    ~~~~~
milliarta@milliarta-Lenovo-G40-80:~/l200170023$ ./a.out /bin/ls /ls
Child process
Child Terminated
a.out exec.c fork.c ilham.txt wait.c
milliarta@milliarta-Lenovo-G40-80:~/l200170023$
```

```
milliarta@milliarta-Lenovo-G40-80: ~/l200170023
exec.c:30:3: warning: implicit declaration of function 'wait'; did you mean 'main'? [-Wimplicit-function-declaration]
wait(NULL);
~~~~~
main
exec.c:16:2: warning: switch condition has boolean value [-Wswitch-bool]
switch(pid == fork())
~~~~~
milliarta@milliarta-Lenovo-G40-80:~/l200170023$ ./a.out /bin/ls /ls
Child process
Child Terminated
a.out exec.c fork.c ilham.txt wait.c
milliarta@milliarta-Lenovo-G40-80:~/l200170023$ gedit stat.c
milliarta@milliarta-Lenovo-G40-80:~/l200170023$ gcc stat.c
stat.c: In function 'main':
stat.c:24: warning: format '%d' expects argument of type 'int', but argument 2 has type '__blksize_t {aka long int}' [-Wformat=]
printf("Block size : %d\n", file.st_blksize);
~~~~~
stat.c:20:30: warning: format '%d' expects argument of type 'int', but argument 2 has type '__blkcnt_t {aka long int}' [-Wformat=]
printf("Blocks allocated : %d\n", file.st_blocks);
~~~~~
stat.c:21:23: warning: format '%d' expects argument of type 'int', but argument 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);
~~~~~
milliarta@milliarta-Lenovo-G40-80:~/l200170023$
```

The screenshot shows a Linux terminal window with a dark background. The title bar at the top indicates the system is Ubuntu 20.04 LTS, with the date and time 'Sat 20:29' and window controls. The terminal window has three tabs open, all showing the same directory: 'milliarta@milliarta-Lenovo-G40-80: ~/l200170023'. The active tab is the first one.

The terminal content shows the execution of a program. The first line is a printf statement: `printf("Block size : %d\n", file.st_blksize);`. This is followed by a warning from `stat.c:20:30`: `warning: format '%d' expects argument of type 'int', but argument 2 has type '__blkcnt_t [aka long int]' [-Wformat=]`. The next line is another printf: `printf("Blocks allocated : %d\n", file.st_blocks);`, followed by a similar warning from `stat.c:21:23`: `warning: format '%d' expects argument of type 'int', but argument 2 has type '__ino_t [aka long unsigned int]' [-Wformat=]`. The third line is `printf("Inode no. : %d\n", file.st_ino);`, followed by a warning from `stat.c:24:23`: `warning: format '%d' expects argument of type 'int', but argument 2 has type '__off_t [aka long int]' [-Wformat=]`. The fourth line is `printf("File size : %d bytes\n", file.st_size);`, followed by a warning from `stat.c:26`: `warning: format '%d' expects argument of type 'int', but argument 2 has type '__nlink_t [aka long unsigned int]' [-Wformat=]`. The fifth line is `printf("No. of links : %d\n", file.st_nlink);`.

After the warnings, the user runs `gcc dirlist.c` and `gcc dirlist.c` twice. Then, they run `./a.out`, which outputs `Usage : ./a.out <dirname>`. Finally, they run `./a.out .`, which lists the contents of the current directory: `wait.c`, `exec.c`, `..`, `stat.c`, `.`, `fork.c`, `ilham.txt`, `a.out`, and `dirlist.c`.