LAPORAN PRAKTIKUM
SISTEM OPERASI

Oleh:
Ardi Hergustiyan
L200210241
Kelas E

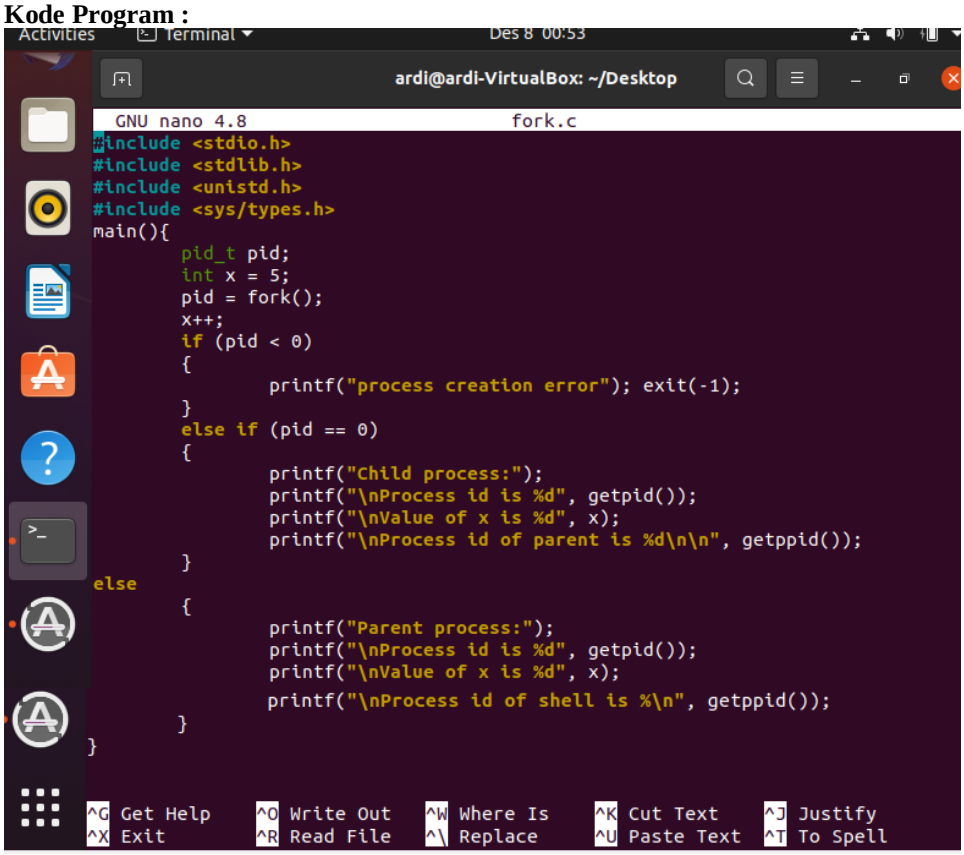
UNIVERSITAS MUHAMMADIYAH SURAKARTA
TAHUN AJARAN 2021/2022

Lembar Kerja Praktikum

NIM	: L200210241	Nilai Praktek :
Nama	: Ardi Hergustiyan	
Nama Asisten	: -	Tanda Tangan :
	-	
Tanggal Praktikum	: 06/12/2022	

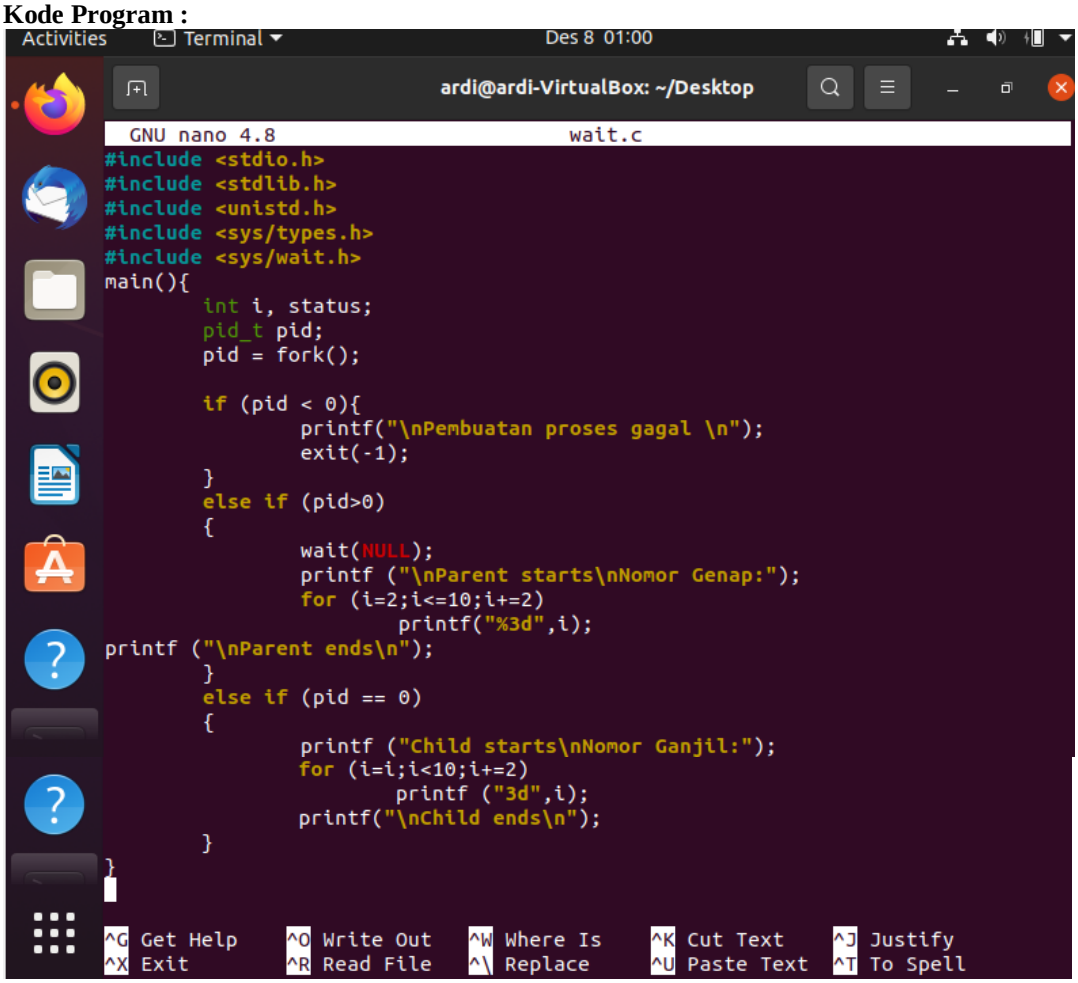
1. Membuat sebuah Child Process dengan menggunakan system call “fork”

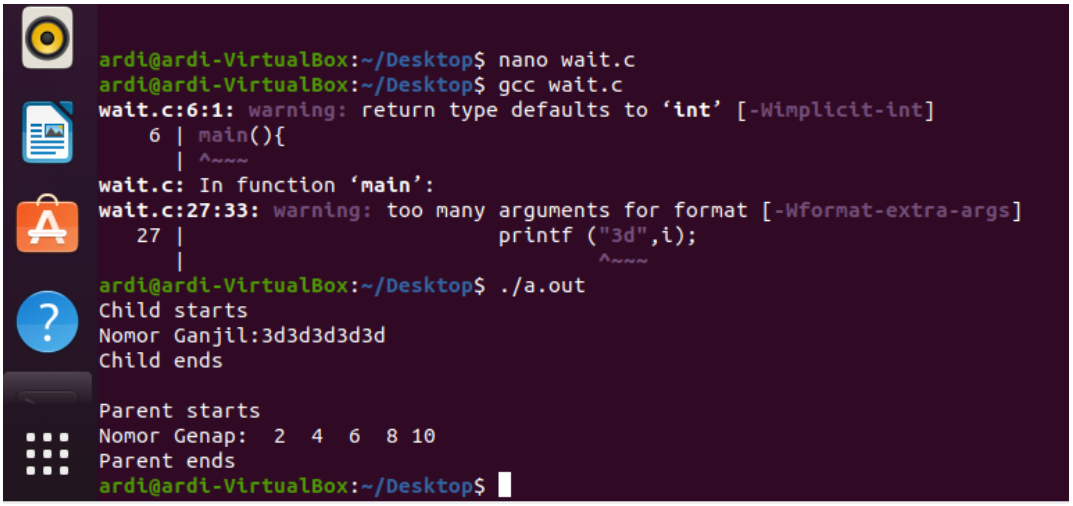
Kode Program :



2. Menghentikan sementara (block) proses parent sampai dengan proses chile selesai, menggunakan perintah system call “wait”

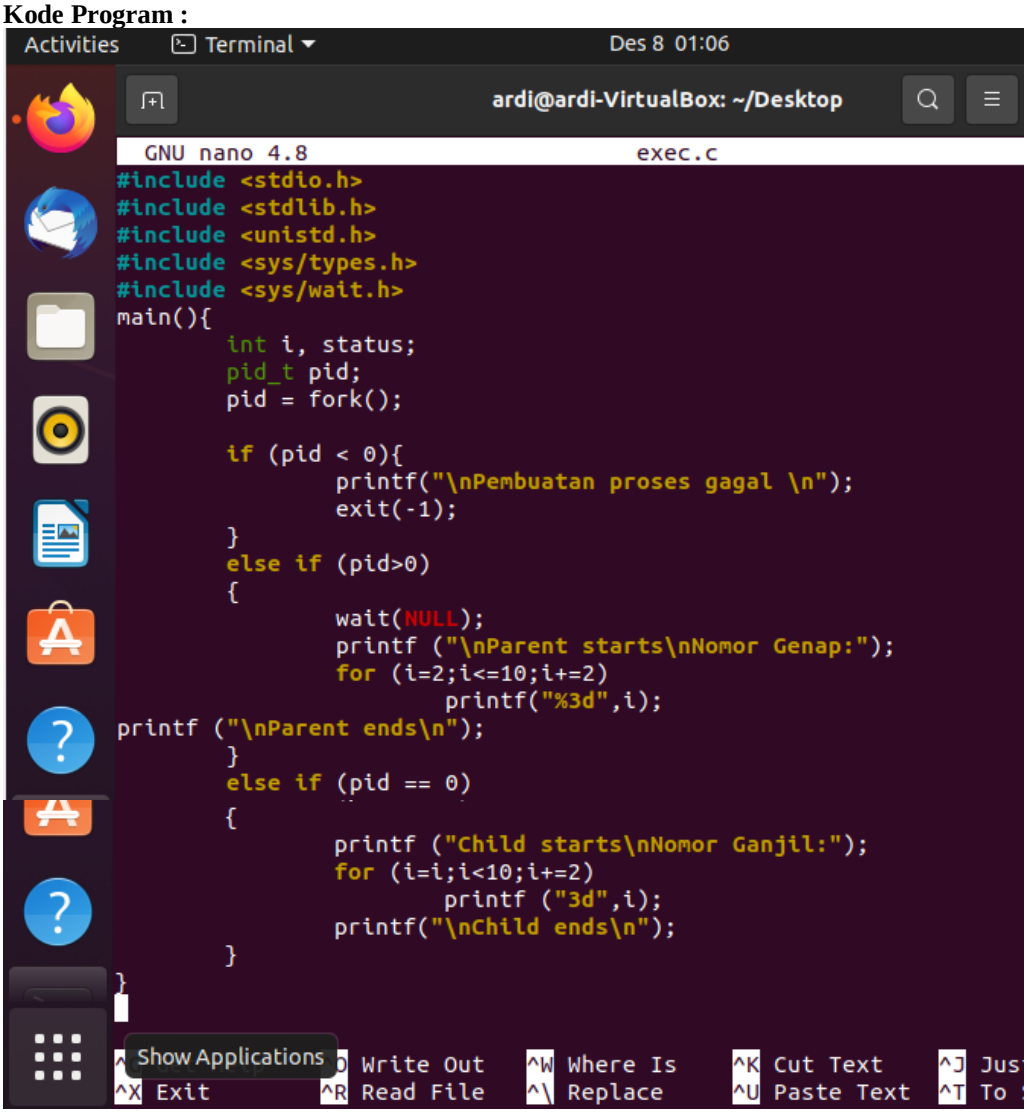
Kode Program :

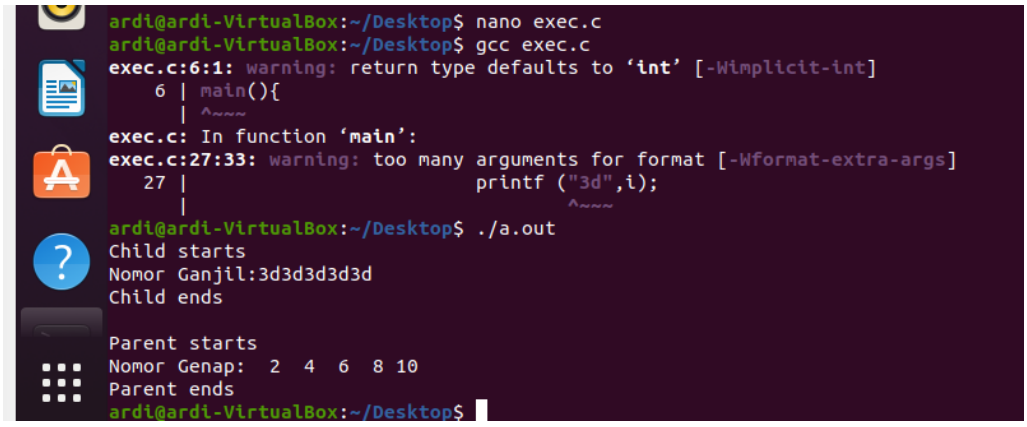




3. Loading program yang dapat dieksekusi dalam sebuah “child” proses menggunakan perintah system call “exec”

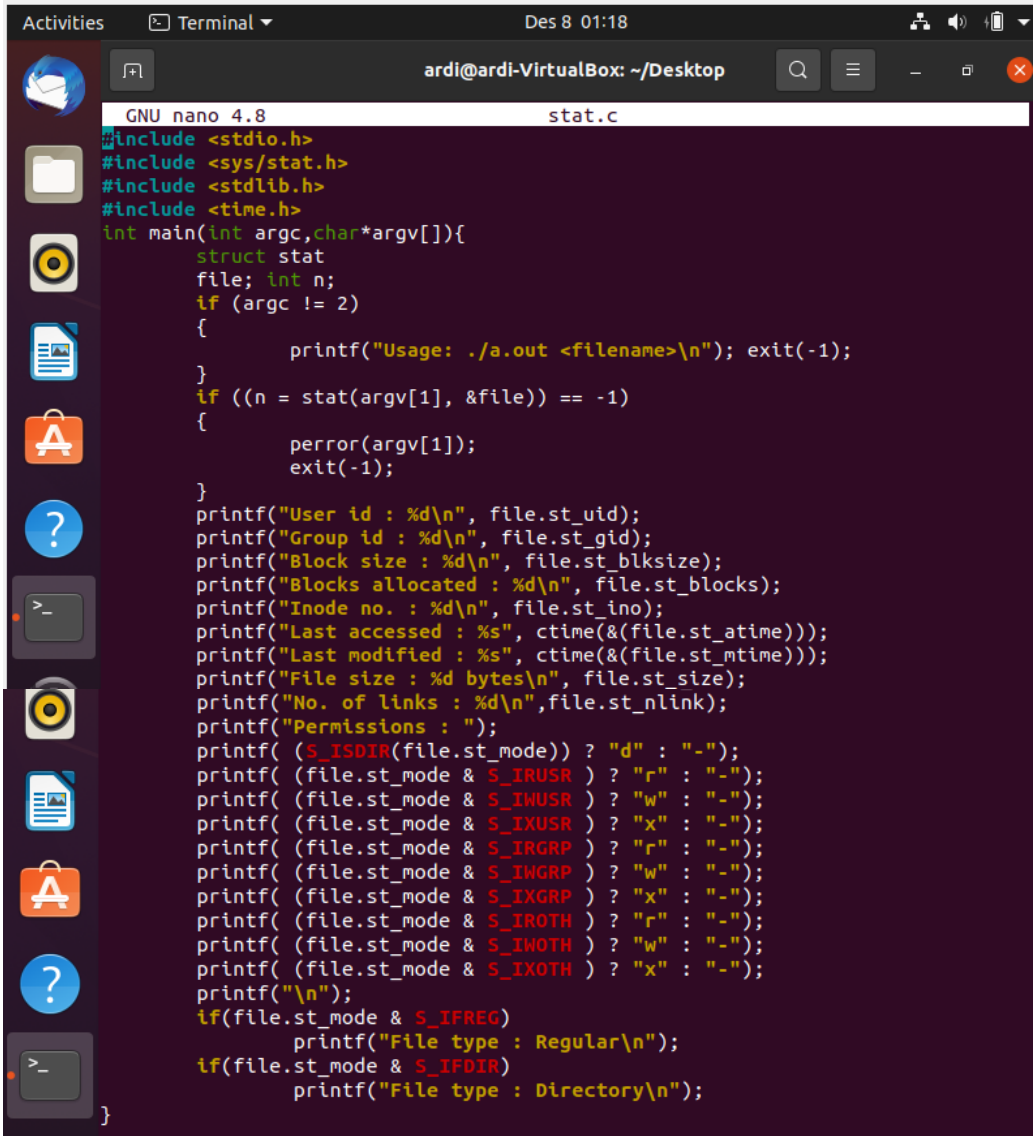
Kode Program :

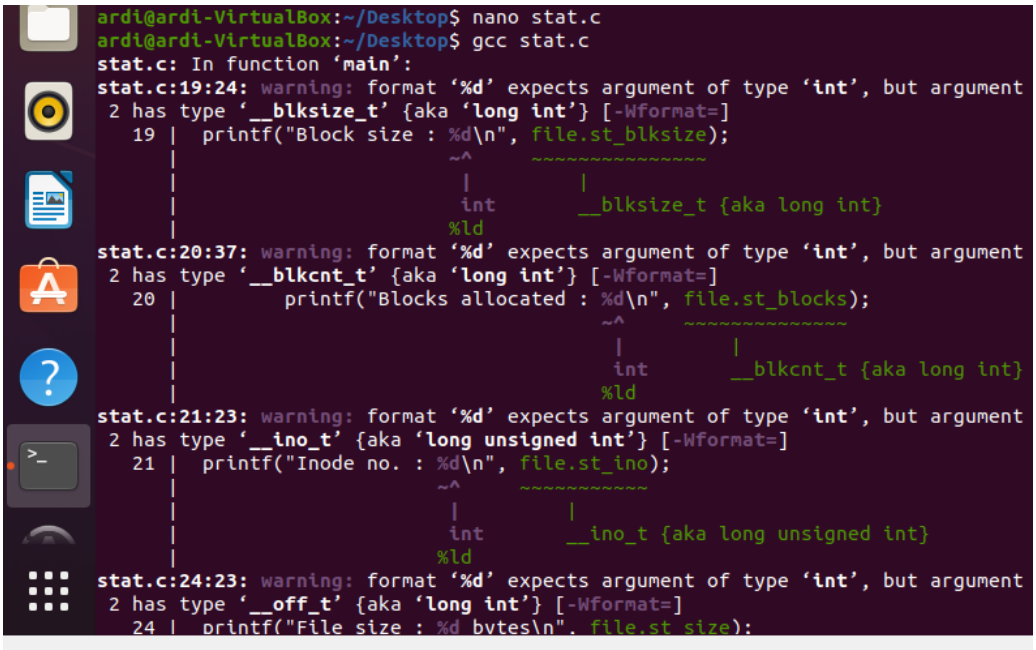




4. Menampilkan status file menggunakan perintah system call “stat”

Kode Program, :


Activities
Terminal
Des 8 01:18
ardi@ardi-VirtualBox: ~/Desktop
GNU nano 4.8
stat.c
#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("Blocks 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");
}


ardi@ardi-VirtualBox:~/Desktop$ nano stat.c
ardi@ardi-VirtualBox:~/Desktop$ gcc stat.c
stat.c: In function 'main':
stat.c:19:24: warning: format '%d' expects argument of type 'int', but argument 2 has type '__blksize_t' {aka 'long int'} [-Wformat=]
19 | printf("Block size : %d\n", file.st_blksize);
| ~^ ~~~~~~~~~~~~~~~~
| | |
| int __blksize_t {aka long int}
| %ld
stat.c:20:37: warning: format '%d' expects argument of type 'int', but argument 2 has type '__blkcnt_t' {aka 'long int'} [-Wformat=]
20 | printf("Blocks allocated : %d\n", file.st_blocks);
| ~^ ~~~~~~~~~~~~~~~
| | |
| int __blkcnt_t {aka long int}
| %ld
stat.c:21:23: warning: format '%d' expects argument of type 'int', but argument 2 has type '__ino_t' {aka 'long unsigned int'} [-Wformat=]
21 | printf("Inode no. : %d\n", file.st_ino);
| ~^ ~~~~~~~~~~~
| | |
| int __ino_t {aka long unsigned int}
| %ld
stat.c:24:23: warning: format '%d' expects argument of type 'int', but argument 2 has type '__off_t' {aka 'long int'} [-Wformat=]
24 | printf("File size : %d bytes\n", file.st_size);

5. Menampilkan isi direktori menggunakan perintah system call "readdir"
Kode Program :