Nama   : Mu'taz Al Farisi
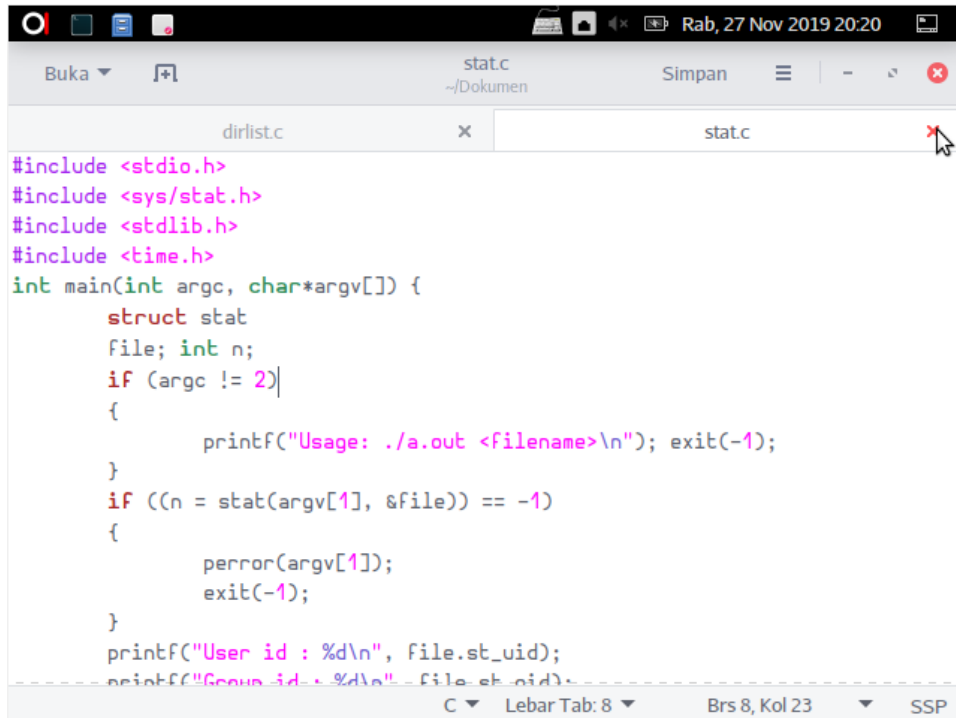
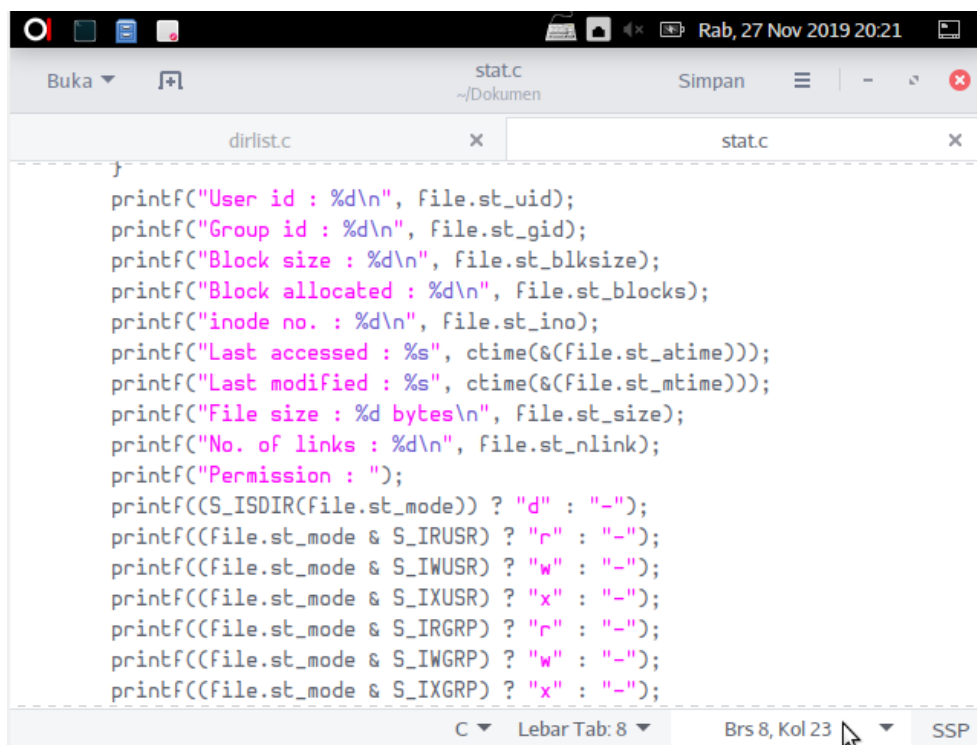NIM   : L200180152

Kelas   : D

TUGAS PRAKTIKUM SISTEM OPERASI

1. **Stat.c**


```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);
```
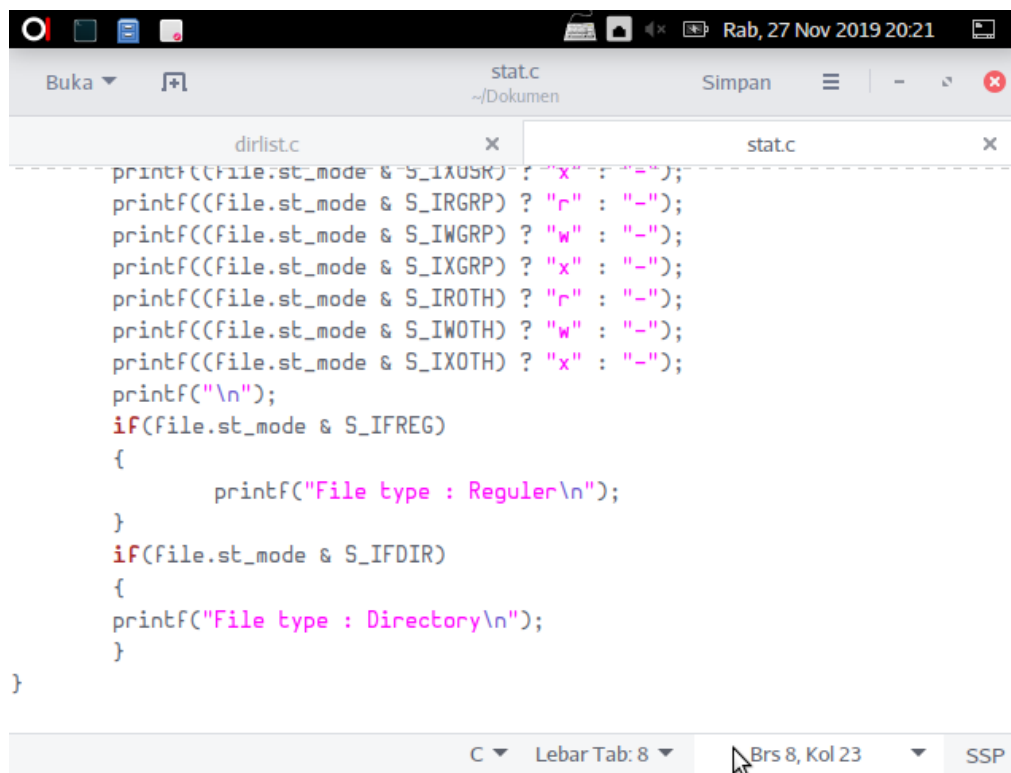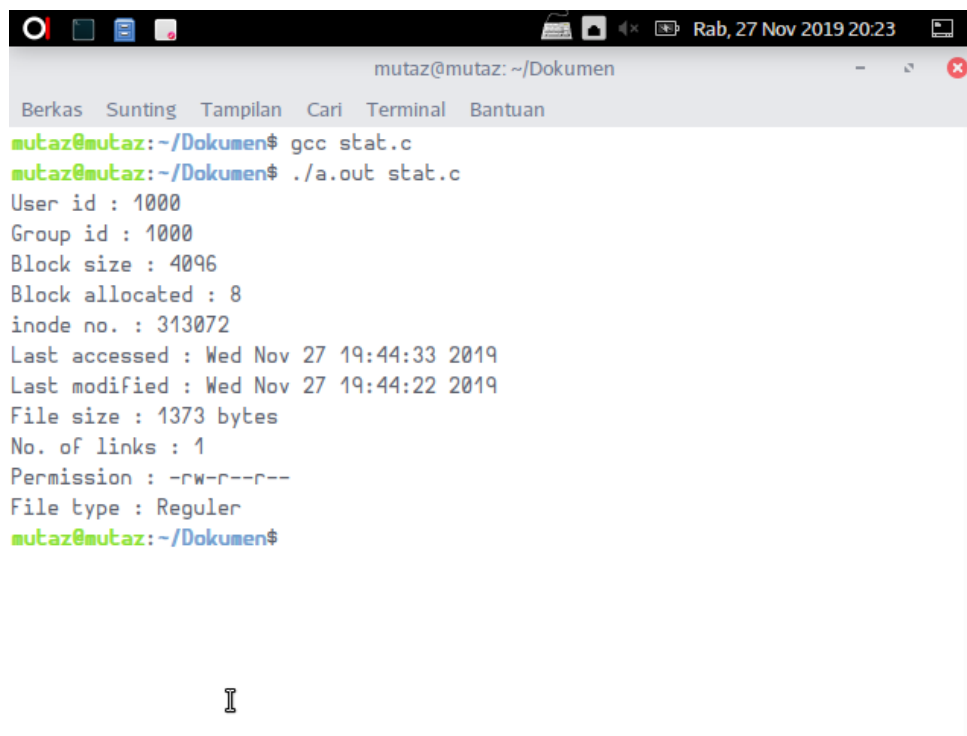


```c
        }
        printf("User id : %d\n", file.st_uid);
        printf("Group id : %d\n", file.st_gid);
        printf("Block size : %d\n", file.st_blksize);
        printf("Block allocated : %d\n", file.st_blocks);
        printf("inode no. : %d\n", file.st_ino);
        printf("Last accessed : %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("Permission : ");
        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" : "-");
```
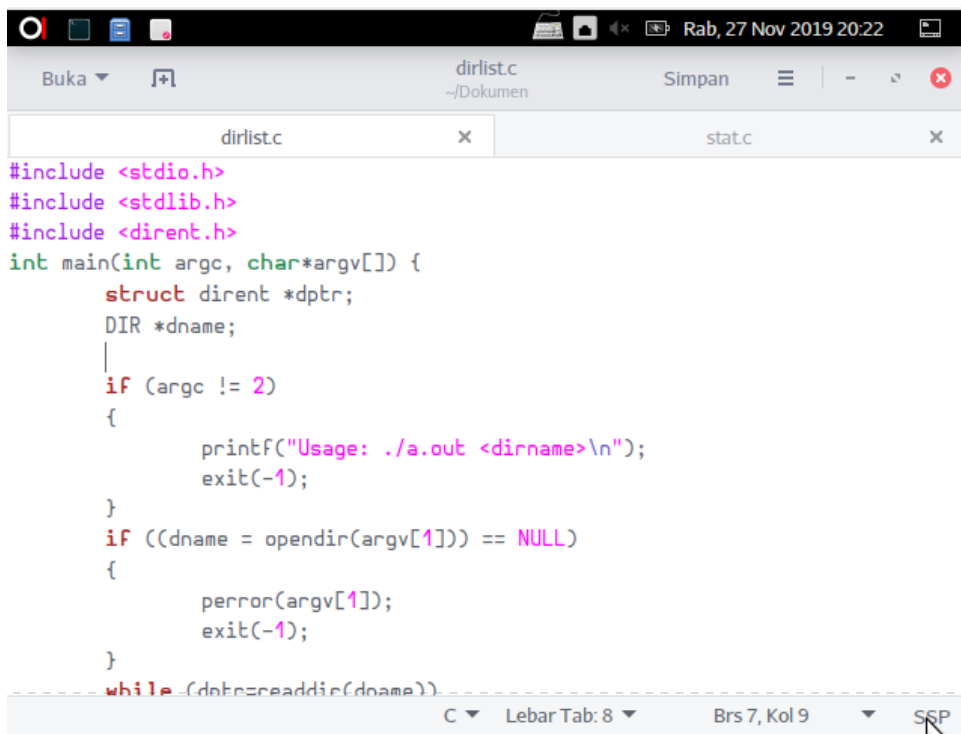
```c
printf((file.st_mode & S_IXUSR) ? "x" : "-");
printf((file.st_mode & S_IRGRP) ? "r" : "-");
printf((file.st_mode & S_IWGRP) ? "w" : "-");
printf((file.st_mode & S_IXGRP) ? "x" : "-");
printf((file.st_mode & S_IROTH) ? "r" : "-");
printf((file.st_mode & S_IWOTH) ? "w" : "-");
printf((file.st_mode & S_IXOTH) ? "x" : "-");
printf("\n");
if(file.st_mode & S_IFREG)
{
        printf("File type : Reguler\n");
}
if(file.st_mode & S_IFDIR)
{
printf("File type : Directory\n");
}
}
```

```
mutaz@mutaz:~/Dokumen$ gcc stat.c
mutaz@mutaz:~/Dokumen$ ./a.out stat.c
User id : 1000
Group id : 1000
Block size : 4096
Block allocated : 8
inode no. : 313072
Last accessed : Wed Nov 27 19:44:33 2019
Last modified : Wed Nov 27 19:44:22 2019
File size : 1373 bytes
No. of links : 1
Permission : -rw-r--r--
File type : Reguler
mutaz@mutaz:~/Dokumen$
```
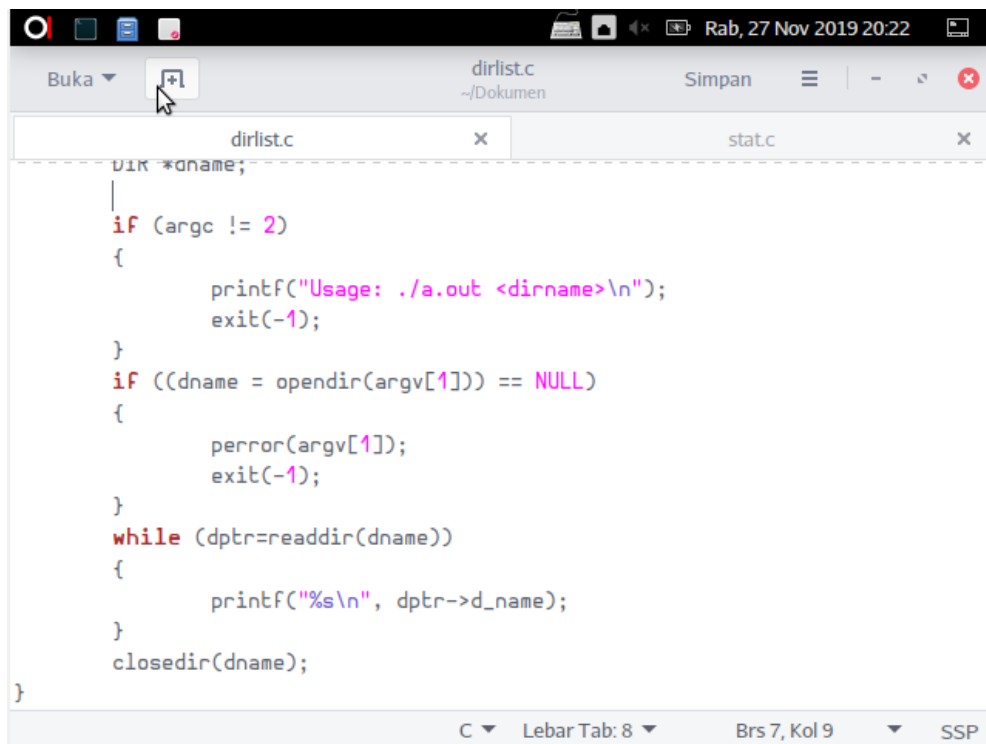
2. Dirlist.c


```c
#include <stdio.h>
#include <stdlib.h>
#include <dirent.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))
```
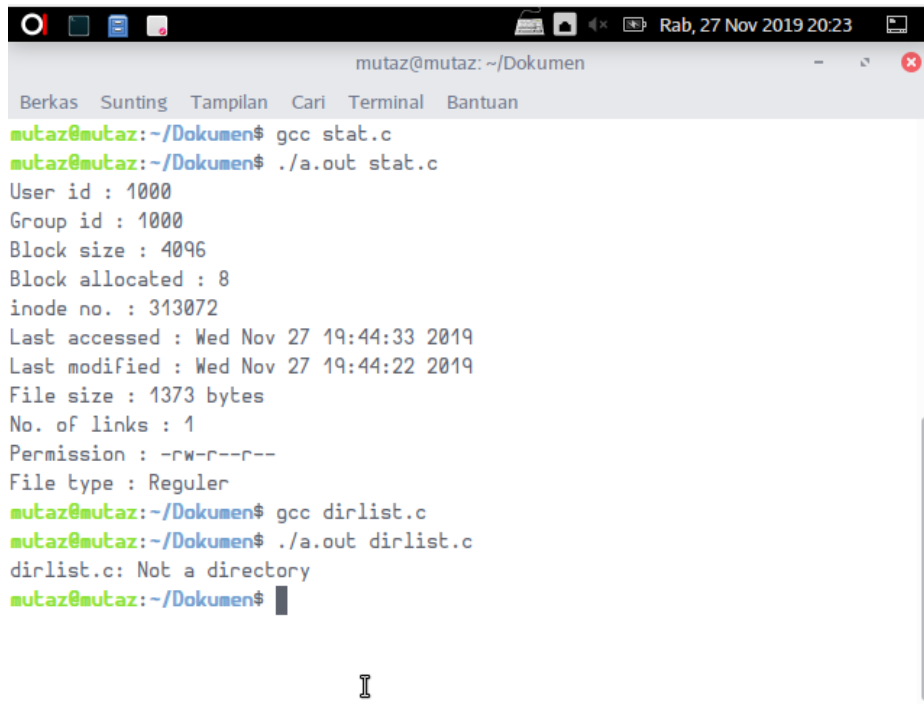


```c
        DIR *dname;

        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);
}
```

Berkas   Sunting   Tampilan   Cari   Terminal   Bantuan

```
mutaz@mutaz:~/Dokumen$ gcc stat.c
mutaz@mutaz:~/Dokumen$ ./a.out stat.c
User id : 1000
Group id : 1000
Block size : 4096
Block allocated : 8
inode no. : 313072
Last accessed : Wed Nov 27 19:44:33 2019
Last modified : Wed Nov 27 19:44:22 2019
File size : 1373 bytes
No. of links : 1
Permission : -rw-r--r--
File type : Reguler
mutaz@mutaz:~/Dokumen$ gcc dirlist.c
mutaz@mutaz:~/Dokumen$ ./a.out dirlist.c
dirlist.c: Not a directory
mutaz@mutaz:~/Dokumen$
```