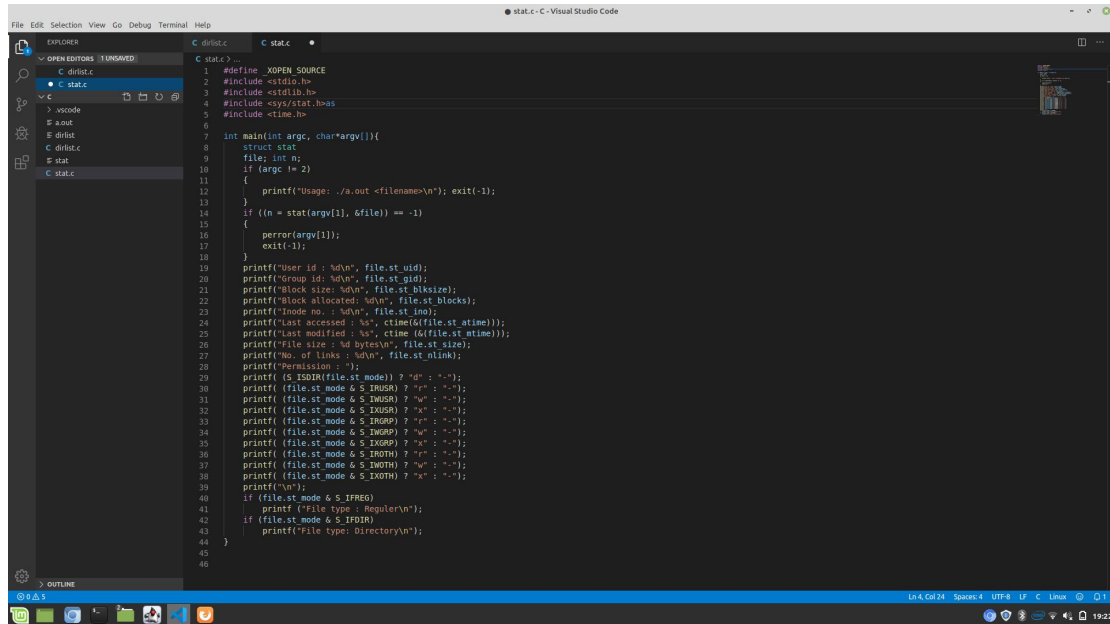


SO MODUL 8

Nama : Arya Mukti A'raafi Zha Putra

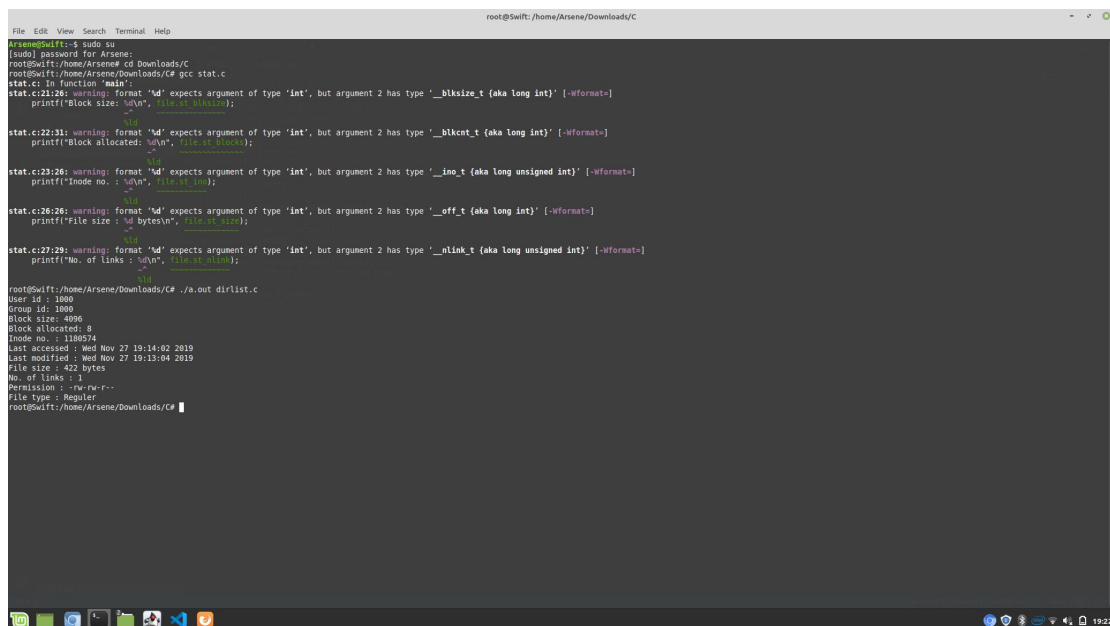
NIM : L200180151

- Mengcompile stat.c



```
1 #define _XOPEN_SOURCE
2 #include <stdio.h>
3 #include <stdlib.h>
4 #include <sys/stat.h>
5 #include <time.h>
6
7 int main(int argc, char*argv[]){
8     struct stat
9     file; int n;
10    if (argc != 2)
11    {
12        printf("Usage: ./a.out <filename>\n"); exit(-1);
13    }
14    if ((n = stat(argv[1], &file)) == -1)
15    {
16        perror(argv[1]);
17        exit(-1);
18    }
19    printf("User id : %d\n", file.st_uid);
20    printf("Group id: %d\n", file.st_gid);
21    printf("Block size: %d\n", file.st_blksize);
22    printf("Block allocated: %d\n", file.st_blocks);
23    printf("Inode no. : %d\n", file.st_ino);
24    printf("Last accessed : %s", ctime(&file.st_atime));
25    printf("Last modified : %s", ctime(&file.st_mtime));
26    printf("File size : %d bytes\n", file.st_size);
27    printf("No. of links : %d\n", file.st_nlink);
28    printf("Permission : ");
29    printf(" (%s)", file.st_mode);
30    printf(" (%s)", file.st_mode & S_IRUSR);
31    printf(" (%s)", file.st_mode & S_IWUSR);
32    printf(" (%s)", file.st_mode & S_IXUSR);
33    printf(" (%s)", file.st_mode & S_IRGRP);
34    printf(" (%s)", file.st_mode & S_IWGRP);
35    printf(" (%s)", file.st_mode & S_IXGRP);
36    printf(" (%s)", file.st_mode & S_IROTH);
37    printf(" (%s)", file.st_mode & S_IWOTH);
38    printf(" (%s)", file.st_mode & S_IXOTH);
39    printf("\n");
40    if (file.st_mode & S_IFREG)
41    {
42        printf("File type : Regular\n");
43    }
44    if (file.st_mode & S_IFDIR)
45    {
46        printf("File type : Directory\n");
47    }
48 }
```

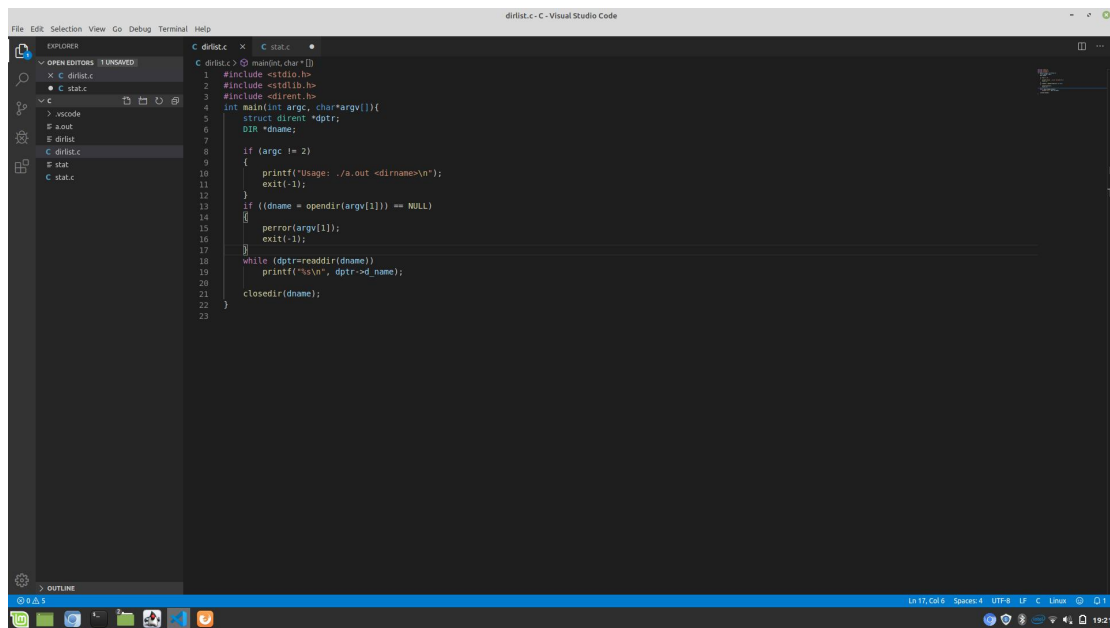
(Kode Program stat.c)



```
root@Swift:/home/Arsene/Downloads/C# gcc stat.c
stat.c: In function 'main':
stat.c:22:26: 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:23:31: warning: format '%d' expects argument of type 'int', but argument 2 has type 'blkcnt_t {aka long int}' [-Wformat-]
   printf("Block allocated: %d\n", file.st_blocks);
                               ^
stat.c:23:26: 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:26:26: 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:27:29: 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@Swift:/home/Arsene/Downloads/C# ./a.out dirlist.c
User id : 1000
Group id: 1000
Block size: 4096
Block allocated: 8
Inode no. : 1180574
Last accessed : Wed Nov 27 19:14:02 2019
Last modified : Wed Nov 27 19:13:04 2019
File size : 422 Bytes
No. of links : 1
Permission : -rw-rw-r--
File type : Regular
root@Swift:/home/Arsene/Downloads/C#
```

(Hasil compile kode program stat.c)

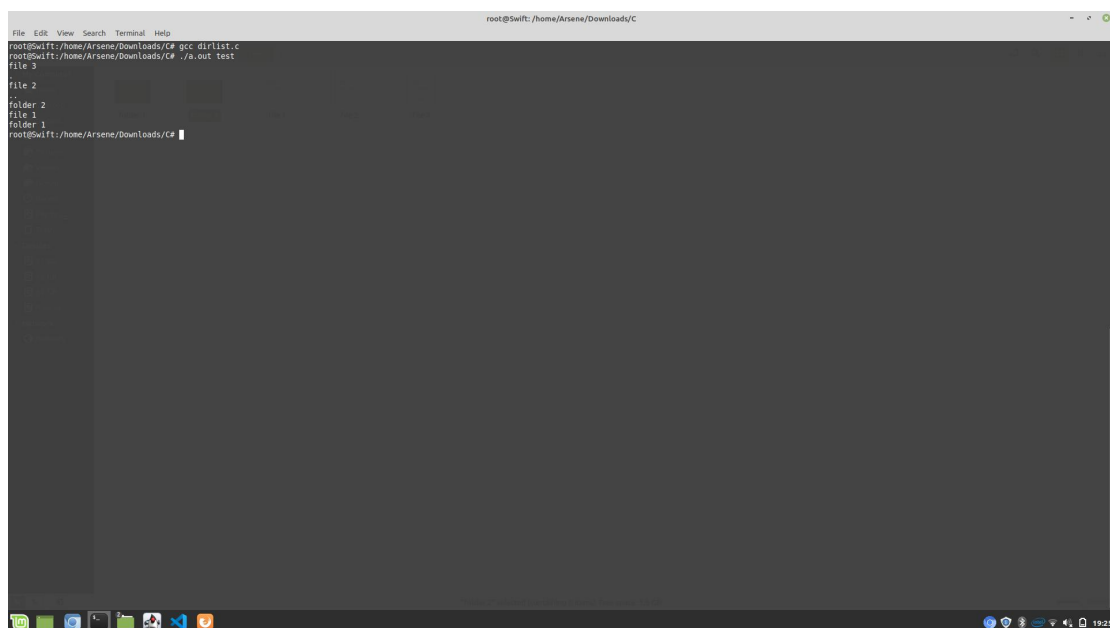
- Mengcompile dirlist.c



The screenshot shows the Visual Studio Code editor with the file `dirlist.c` open. The code is a C program that takes a directory path as an argument and lists its contents. The code is as follows:

```
1 #include <stdio.h>
2 #include <stdlib.h>
3 #include <dirent.h>
4 int main(int argc, char*argv[]){
5     struct dirent *dptr;
6     DIR *dname;
7
8     if (argc != 2)
9     {
10         printf("Usage: ./a.out <dirname>\n");
11         exit(1);
12     }
13     if ((dname = opendir(argv[1])) == NULL)
14     {
15         perror(argv[1]);
16         exit(1);
17     }
18     while ((dptr=readdir(dname))
19         printf("%s\n", dptr->d_name);
20     }
21     closedir(dname);
22 }
```

(Kode Program dirlist.c)



The screenshot shows a terminal window with the following commands and output:

```
root@swift:/home/Arsene/Downloads/C# gcc dirlist.c
root@swift:/home/Arsene/Downloads/C# ./a.out test
file 3
file 2
..
folder 2
file 1
folder 1
root@swift:/home/Arsene/Downloads/C#
```

(Hasil compile kode program dirlist.c)