

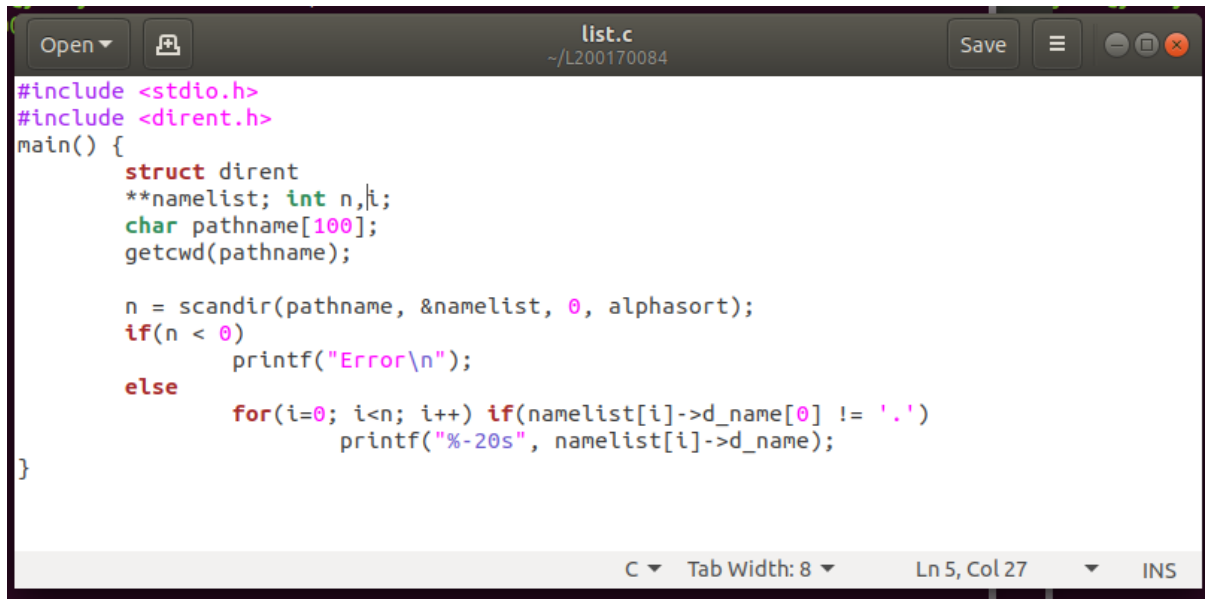
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## MODUL10

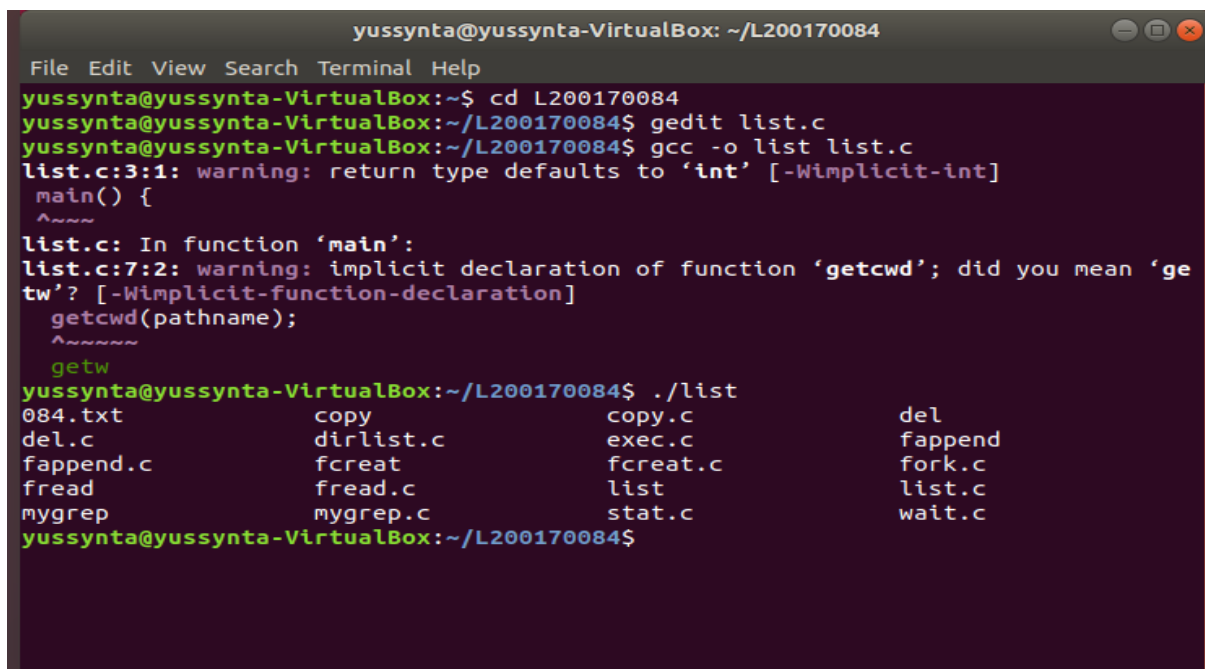
1. Masuk ke direktori nim, kemudian ketik "gedit list.c", tulis Kode Program dan save

A screenshot of a code editor window titled 'list.c' with the path '~/L200170084'. The editor contains C code for a directory listing function. The code includes `<stdio.h>` and `<dirent.h>`, defines a `main()` function, and uses `scandir` to list files in the current directory. It prints the names of files and directories, excluding the current directory ('.') and parent directory ('..').

```
#include <stdio.h>
#include <dirent.h>
main() {
    struct dirent
        **namelist; int n,i;
    char pathname[100];
    getcwd(pathname);

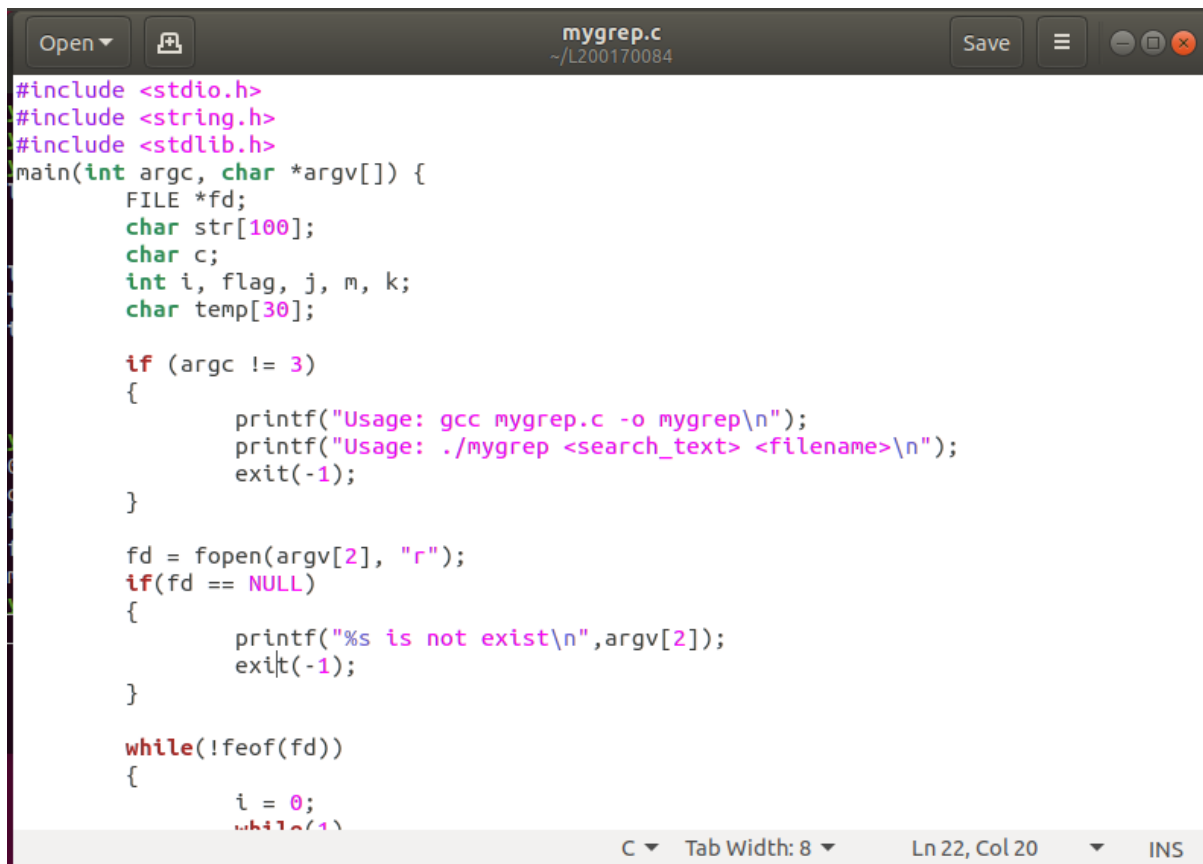
    n = scandir(pathname, &namelist, 0, alphasort);
    if(n < 0)
        printf("Error\n");
    else
        for(i=0; i<n; i++) if(namelist[i]->d_name[0] != '.')
            printf("%-20s", namelist[i]->d_name);
}
```

2. Compile dengan "gcc -o list list.c"(enter), kemudian ketikkan "./list"(enter). Fungsi list itu sama seperti fungsi ls

A screenshot of a terminal window titled 'yussynta@yussynta-VirtualBox: ~/L200170084'. The terminal shows the user navigating to the directory, creating and editing 'list.c', compiling it with 'gcc -o list list.c', and then running './list'. The output of the program is a directory listing of the current directory, showing files like '084.txt', 'del.c', 'fappend.c', 'fread.c', 'mygrep', 'copy', 'dirlist.c', 'fcreat.c', 'fread.c', 'mygrep.c', 'copy.c', 'exec.c', 'fcreat.c', 'list', 'stat.c', 'del', 'fappend', 'fork.c', 'list.c', and 'wait.c'.

```
yussynta@yussynta-VirtualBox: ~/L200170084
File Edit View Search Terminal Help
yussynta@yussynta-VirtualBox:~$ cd L200170084
yussynta@yussynta-VirtualBox:~/L200170084$ gedit list.c
yussynta@yussynta-VirtualBox:~/L200170084$ gcc -o list list.c
list.c:3:1: warning: return type defaults to 'int' [-Wimplicit-int]
main() {
^~~~~
list.c: In function 'main':
list.c:7:2: warning: implicit declaration of function 'getcwd'; did you mean 'getw'? [-Wimplicit-function-declaration]
    getcwd(pathname);
    ^~~~~~
    getw
yussynta@yussynta-VirtualBox:~/L200170084$ ./list
084.txt      copy          copy.c        del
del.c        dirlist.c     exec.c        fappend
fappend.c    fcreat        fcreat.c      fork.c
fread        fread.c       list          list.c
mygrep       mygrep.c      stat.c        wait.c
yussynta@yussynta-VirtualBox:~/L200170084$
```

3. Kemudian lanjutkan dengan “gedit mygrep.c”, tulis Kode Program seperti pada gambar di bawah dan save



The screenshot shows a code editor window titled "mygrep.c" with the file path "~/L200170084". The editor contains the following C code:

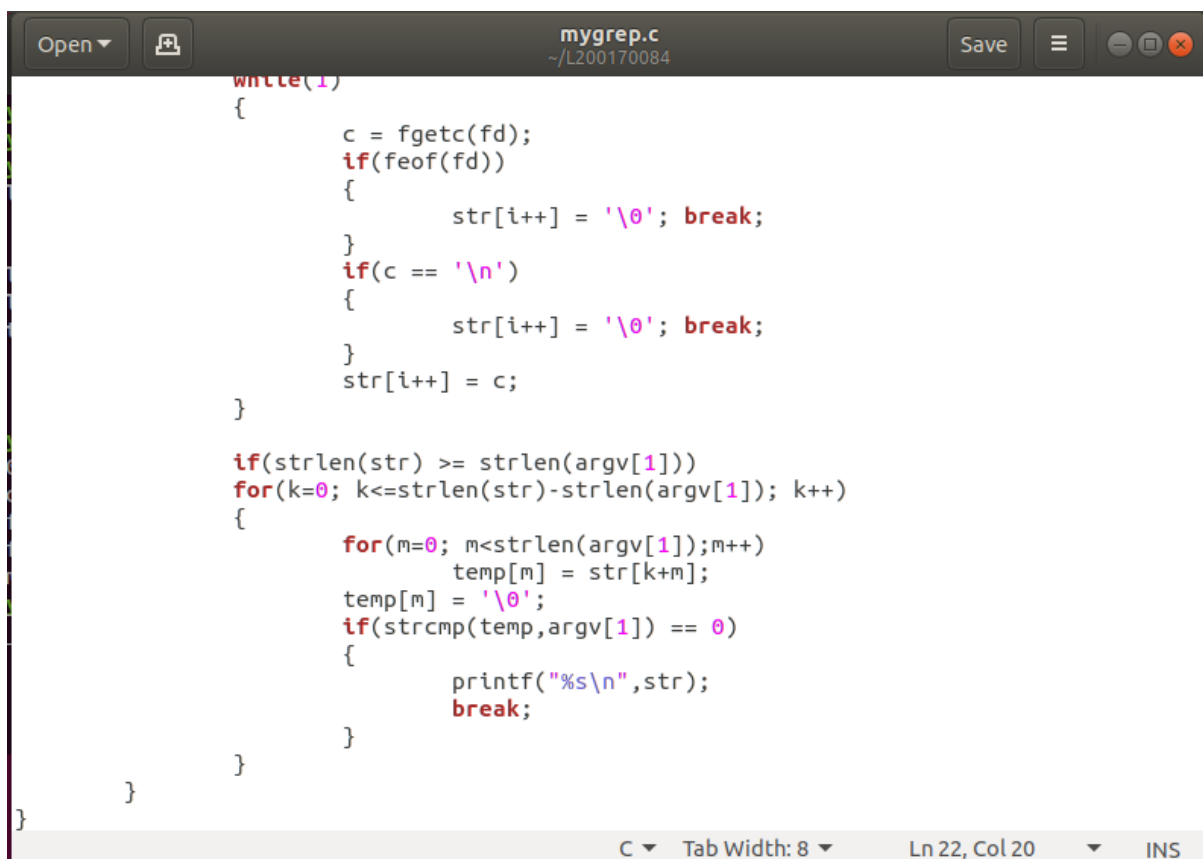
```
#include <stdio.h>
#include <string.h>
#include <stdlib.h>
main(int argc, char *argv[]) {
    FILE *fd;
    char str[100];
    char c;
    int i, flag, j, m, k;
    char temp[30];

    if (argc != 3)
    {
        printf("Usage: gcc mygrep.c -o mygrep\n");
        printf("Usage: ./mygrep <search_text> <filename>\n");
        exit(-1);
    }

    fd = fopen(argv[2], "r");
    if(fd == NULL)
    {
        printf("%s is not exist\n",argv[2]);
        exit(-1);
    }

    while(!feof(fd))
    {
        i = 0;
        while(1)
```

The status bar at the bottom indicates "C", "Tab Width: 8", "Ln 22, Col 20", and "INS".



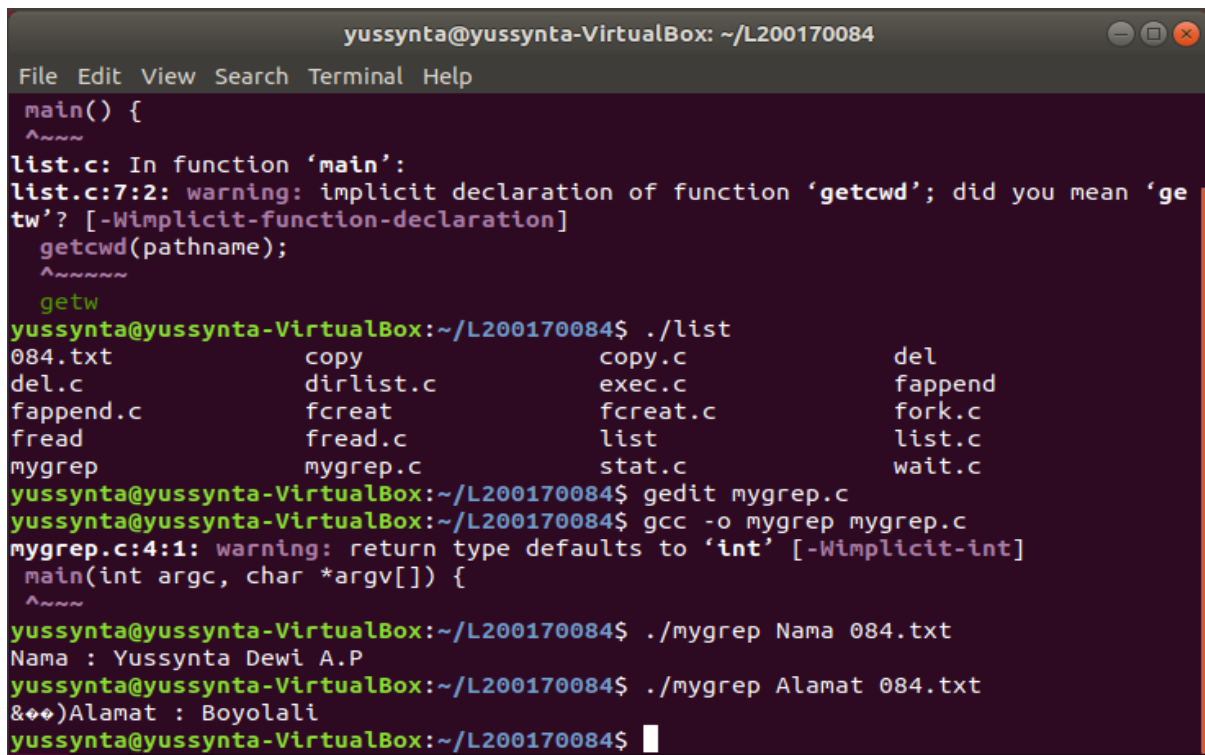
The screenshot shows the continuation of the C code in the "mygrep.c" editor:

```
        {
            c = fgetc(fd);
            if(feof(fd))
            {
                str[i++] = '\0'; break;
            }
            if(c == '\n')
            {
                str[i++] = '\0'; break;
            }
            str[i++] = c;
        }

        if(strlen(str) >= strlen(argv[1]))
        for(k=0; k<=strlen(str)-strlen(argv[1]); k++)
        {
            for(m=0; m<strlen(argv[1]);m++)
                temp[m] = str[k+m];
            temp[m] = '\0';
            if(strcmp(temp,argv[1]) == 0)
            {
                printf("%s\n",str);
                break;
            }
        }
    }
}
```

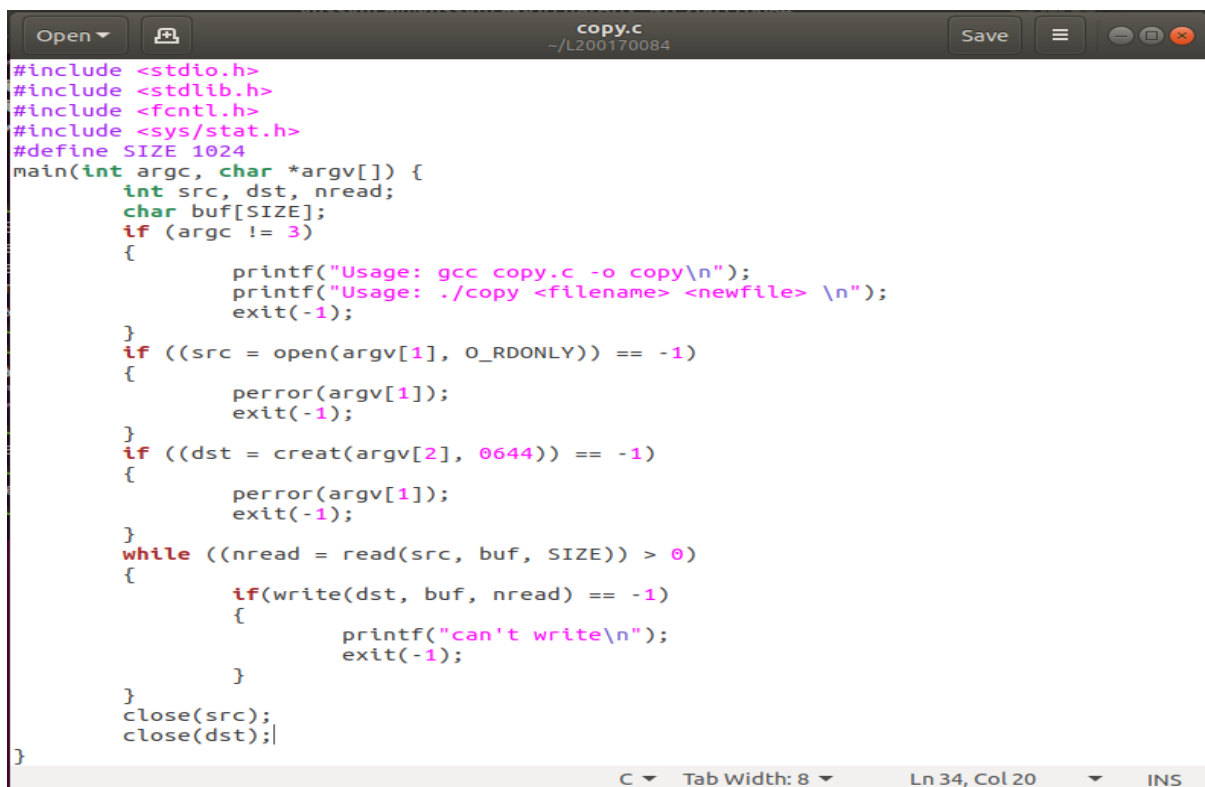
The status bar at the bottom indicates "C", "Tab Width: 8", "Ln 22, Col 20", and "INS".

4. Kemudian compile dengan “gcc -o mygrep mygrep.c”, kemudian ketikkan “./mygrep Nama 084.txt”, **NB:** Nama = kata yang di cari dalam 084.txt



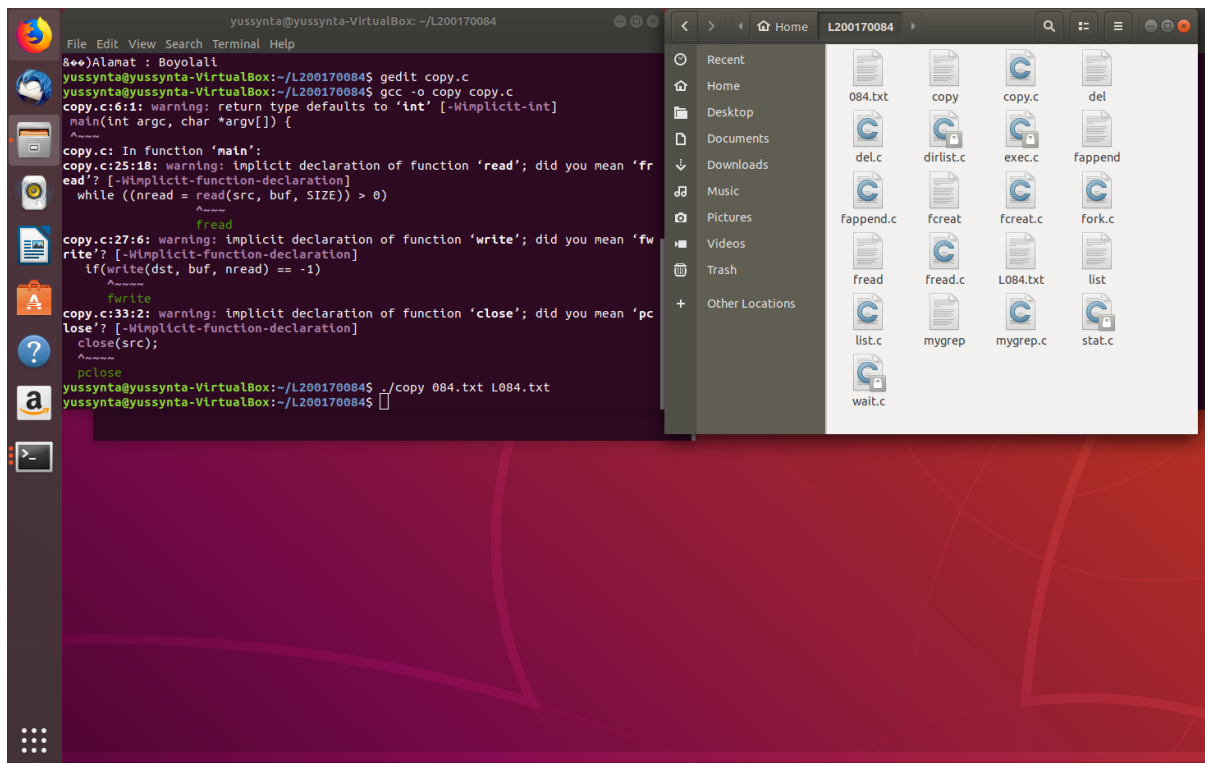
```
yussynta@yussynta-VirtualBox: ~/L200170084
File Edit View Search Terminal Help
main() {
~~~~
list.c: In function 'main':
list.c:7:2: warning: implicit declaration of function 'getcwd'; did you mean 'getw'? [-Wimplicit-function-declaration]
  cwd = getcwd(pathname);
  ~~~~~
  getw
yussynta@yussynta-VirtualBox:~/L200170084$ ./list
084.txt          copy          copy.c        del
del.c            dirlist.c     exec.c        fappend
fappend.c        fcreat        fcreat.c      fork.c
fread            fread.c       list           list.c
mygrep           mygrep.c      stat.c        wait.c
yussynta@yussynta-VirtualBox:~/L200170084$ gedit mygrep.c
yussynta@yussynta-VirtualBox:~/L200170084$ gcc -o mygrep mygrep.c
mygrep.c:4:1: warning: return type defaults to 'int' [-Wimplicit-int]
main(int argc, char *argv[]) {
~~~~
yussynta@yussynta-VirtualBox:~/L200170084$ ./mygrep Nama 084.txt
Nama : Yussynta Dewi A.P
yussynta@yussynta-VirtualBox:~/L200170084$ ./mygrep Alamat 084.txt
&♦♦)Alamat : Boyolali
yussynta@yussynta-VirtualBox:~/L200170084$
```

5. Lanjutkan dengan “gedit copy.c”, tuliskan Kode Program seperti pada gambar di bawah dan save

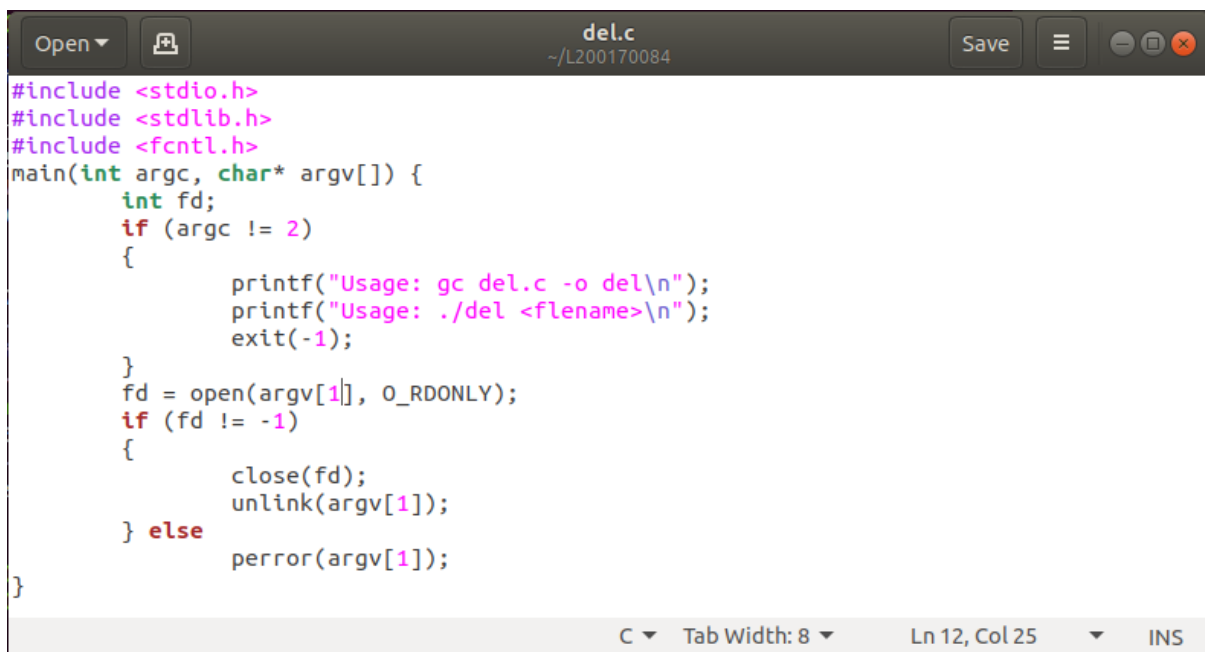


```
copy.c
~/L200170084
Save
#include <stdio.h>
#include <stdlib.h>
#include <fcntl.h>
#include <sys/stat.h>
#define SIZE 1024
main(int argc, char *argv[]) {
    int src, dst, nread;
    char buf[SIZE];
    if (argc != 3)
    {
        printf("Usage: gcc copy.c -o copy\n");
        printf("Usage: ./copy <filename> <newfile> \n");
        exit(-1);
    }
    if ((src = open(argv[1], O_RDONLY)) == -1)
    {
        perror(argv[1]);
        exit(-1);
    }
    if ((dst = creat(argv[2], 0644)) == -1)
    {
        perror(argv[1]);
        exit(-1);
    }
    while ((nread = read(src, buf, SIZE)) > 0)
    {
        if (write(dst, buf, nread) == -1)
        {
            printf("can't write\n");
            exit(-1);
        }
    }
    close(src);
    close(dst);
}
```

6. Kemudian compile “gcc -o copy copy.c”(enter), kemudian ketikkan “./copy 084.txt L084.txt”,  
**NB:** seperti fungsi copy biasa, file 084.txt akan tercopy dengan nama baru L084.txt. bisa melihatnya dengan membuka dokomennya atau dengan perintah ls, seperti pada gambar di bawah:



7. Lanjutkan dengan “gadit del.c”, tulis Kode Program seperti pada gambar di bawah ini dan klik save



8. Compile file “gcc -o del del.c”(enter), kemudian tuliskan “./del L084.txt”, untuk menghapus file L084.txt, bisa di lihat pada gambar di bawah:

