

**PRAKTIKUM SISTEM OPERASI**  
**MODUL 9: FILE SYSTEM CALL**



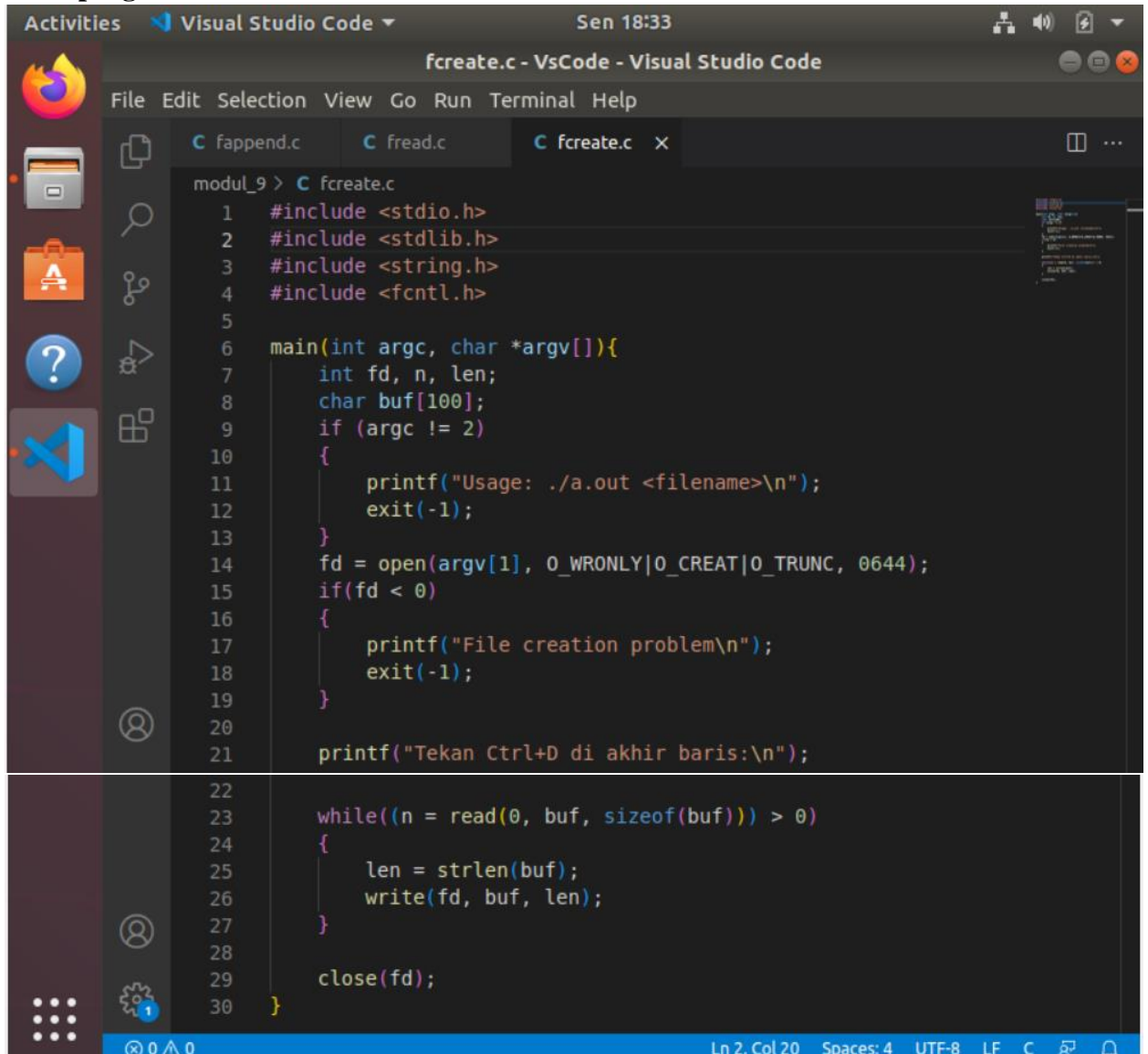
**Penyusun:**

**Nama** : Della Fitria Lestari  
**NIM** : L200219268  
**Kelas** : E  
**Mata Kuliah** : Praktikum Sistem Operasi  
**Program Studi** : Informatika

**PROGRAM STUDI TEKNIK INFORMATIKA**  
**FAKULTAS KOMUNIKASI DAN INFORMATIKA**  
**UNIVERSITAS MUHAMMADIYAH SURAKARTA 2022**

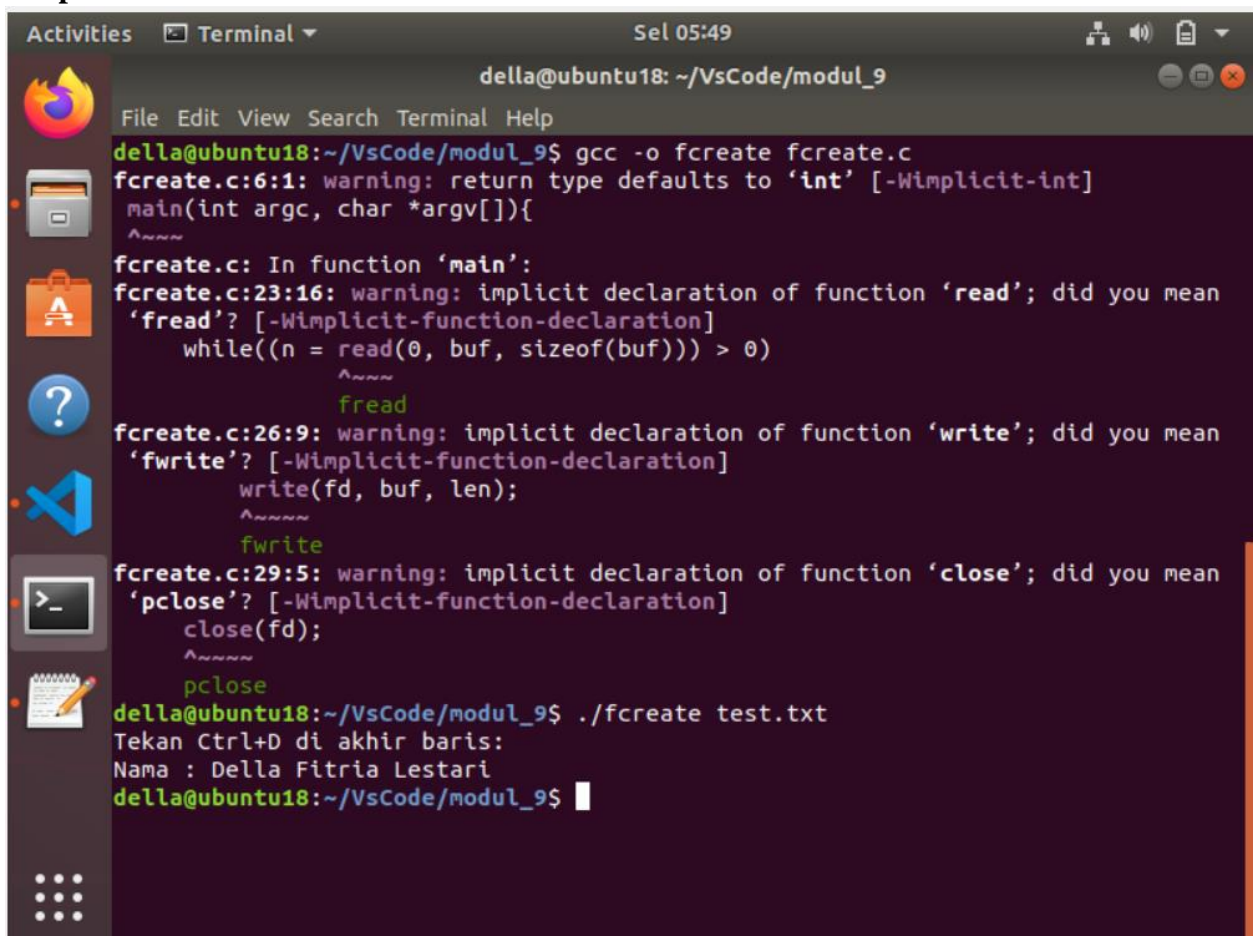
1. Membuat sebuah file dan menuliskan data di dalamnya

**Kode program :**



```
modul_9 > C fcreate.c
1  #include <stdio.h>
2  #include <stdlib.h>
3  #include <string.h>
4  #include <fcntl.h>
5
6  main(int argc, char *argv[]){
7      int fd, n, len;
8      char buf[100];
9      if (argc != 2)
10     {
11         printf("Usage: ./a.out <filename>\n");
12         exit(-1);
13     }
14     fd = open(argv[1], O_WRONLY|O_CREAT|O_TRUNC, 0644);
15     if(fd < 0)
16     {
17         printf("File creation problem\n");
18         exit(-1);
19     }
20
21     printf("Tekan Ctrl+D di akhir baris:\n");
22
23     while((n = read(0, buf, sizeof(buf))) > 0)
24     {
25         len = strlen(buf);
26         write(fd, buf, len);
27     }
28
29     close(fd);
30 }
```

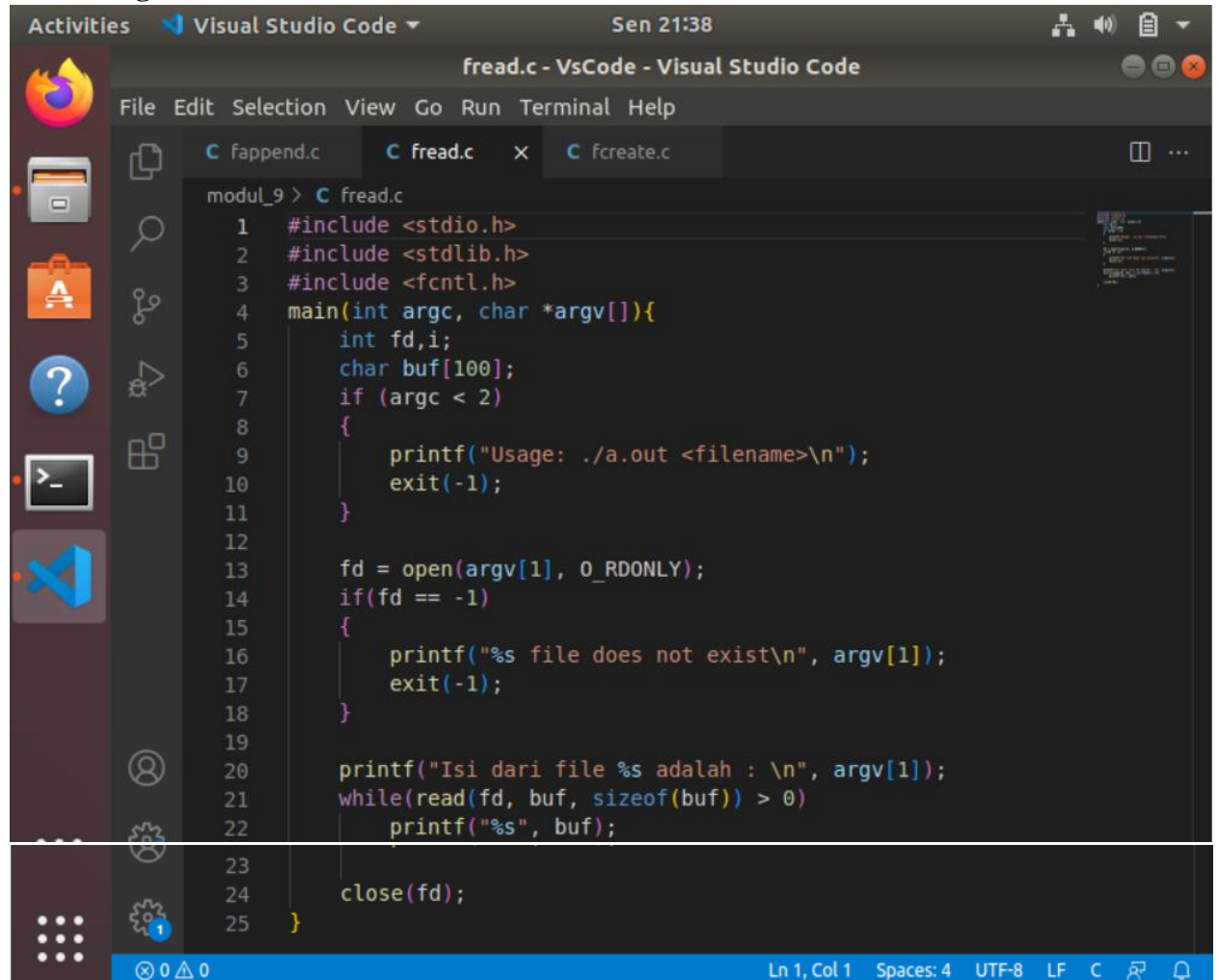
**Output :**



```
della@ubuntu18: ~/VsCode/modul_9
File Edit View Search Terminal Help
della@ubuntu18:~/VsCode/modul_9$ gcc -o fcreate fcreate.c
fcreate.c:6:1: warning: return type defaults to 'int' [-Wimplicit-int]
main(int argc, char *argv[]){
~~~~~
fcreate.c: In function 'main':
fcreate.c:23:16: warning: implicit declaration of function 'read'; did you mean
'fread'? [-Wimplicit-function-declaration]
while((n = read(0, buf, sizeof(buf))) > 0)
~~~~~
fread
fcreate.c:26:9: warning: implicit declaration of function 'write'; did you mean
'fwrite'? [-Wimplicit-function-declaration]
write(fd, buf, len);
~~~~~
fwrite
fcreate.c:29:5: warning: implicit declaration of function 'close'; did you mean
'pclose'? [-Wimplicit-function-declaration]
close(fd);
~~~~~
pclose
della@ubuntu18:~/VsCode/modul_9$ ./fcreate test.txt
Tekan Ctrl+D di akhir baris:
Nama : Della Fitria Lestari
della@ubuntu18:~/VsCode/modul_9$
```

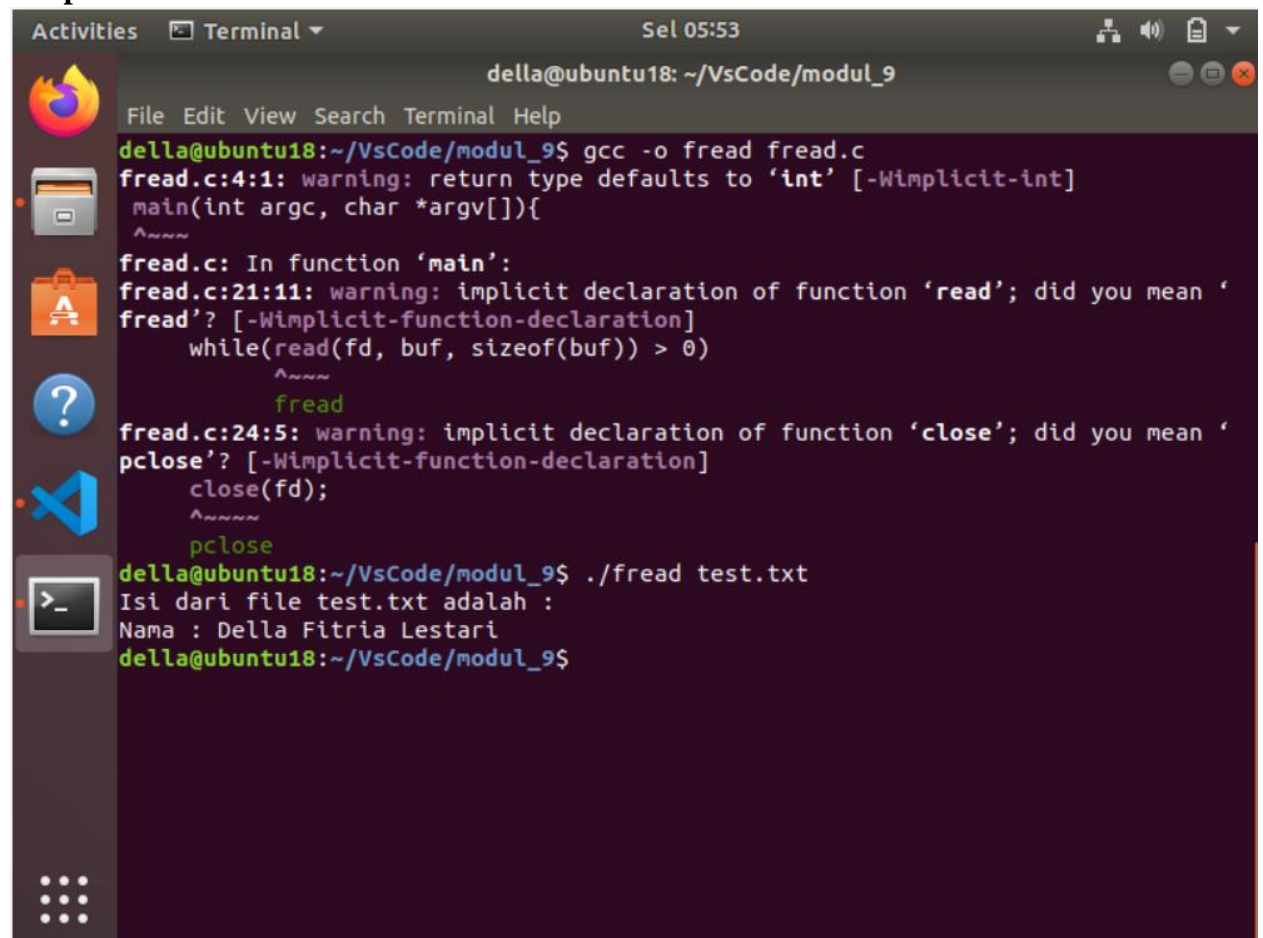
2. Membaca sebuah file dan menampilkan isinya dilayar

#### Kode Program :



```
modul_9 > C fread.c
1  #include <stdio.h>
2  #include <stdlib.h>
3  #include <fcntl.h>
4  main(int argc, char *argv[]){
5      int fd,i;
6      char buf[100];
7      if (argc < 2)
8      {
9          printf("Usage: ./a.out <filename>\n");
10         exit(-1);
11     }
12
13     fd = open(argv[1], O_RDONLY);
14     if(fd == -1)
15     {
16         printf("%s file does not exist\n", argv[1]);
17         exit(-1);
18     }
19
20     printf("Isi dari file %s adalah : \n", argv[1]);
21     while(read(fd, buf, sizeof(buf)) > 0)
22         printf("%s", buf);
23
24     close(fd);
25 }
```

#### Output :

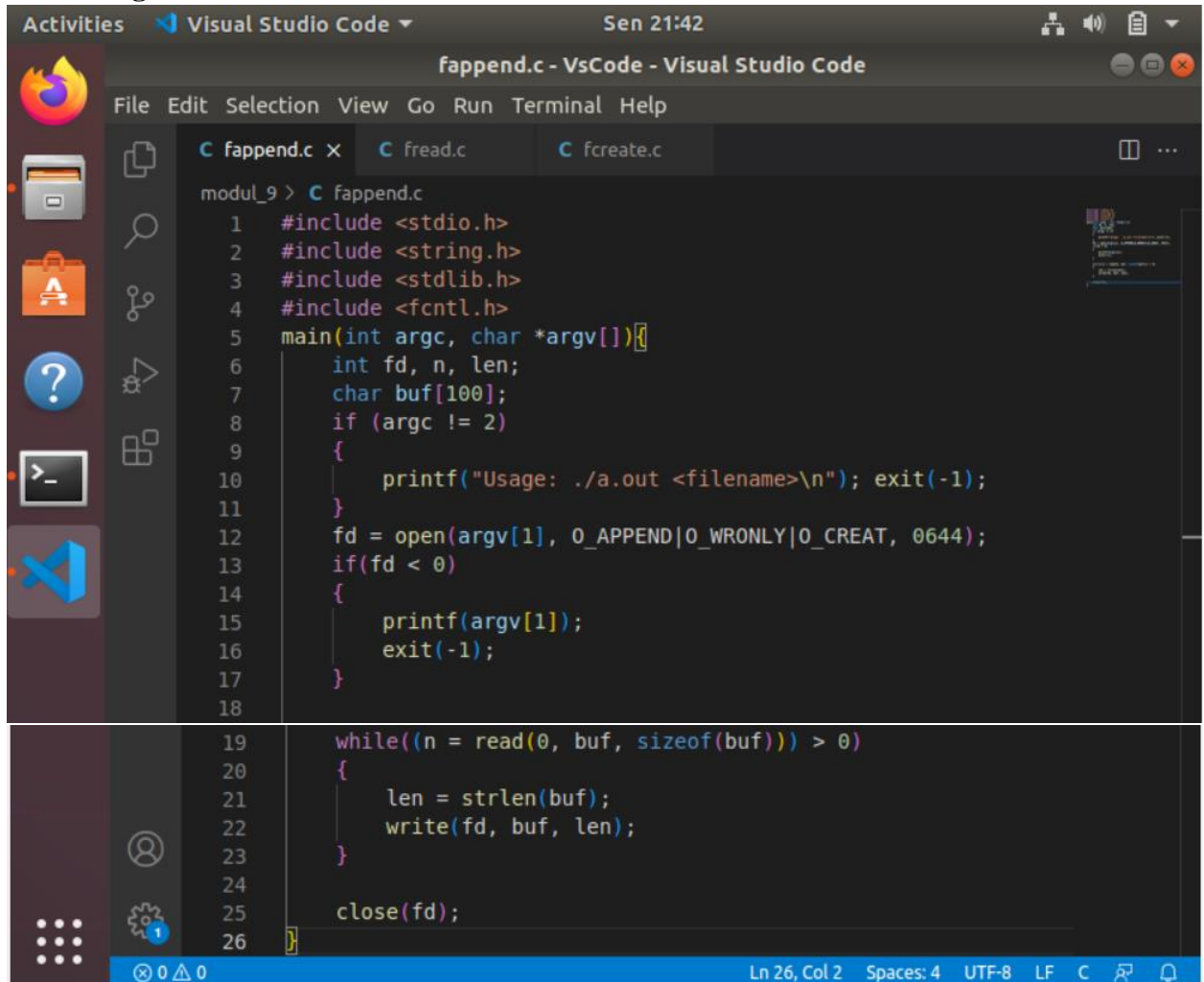


```
della@ubuntu18: ~/VsCode/modul_9
File Edit View Search Terminal Help
della@ubuntu18:~/VsCode/modul_9$ gcc -o fread fread.c
fread.c:4:1: warning: return type defaults to 'int' [-Wimplicit-int]
main(int argc, char *argv[]){
~~~~~
fread.c: In function 'main':
fread.c:21:11: warning: implicit declaration of function 'read'; did you mean 'fread'? [-Wimplicit-function-declaration]
while(read(fd, buf, sizeof(buf)) > 0)
~~~~~
fread
fread.c:24:5: warning: implicit declaration of function 'close'; did you mean 'pclose'? [-Wimplicit-function-declaration]
close(fd);
~~~~~
pclose
della@ubuntu18:~/VsCode/modul_9$ ./fread test.txt
Isi dari file test.txt adalah :
Nama : Della Fitria Lestari
della@ubuntu18:~/VsCode/modul_9$
```



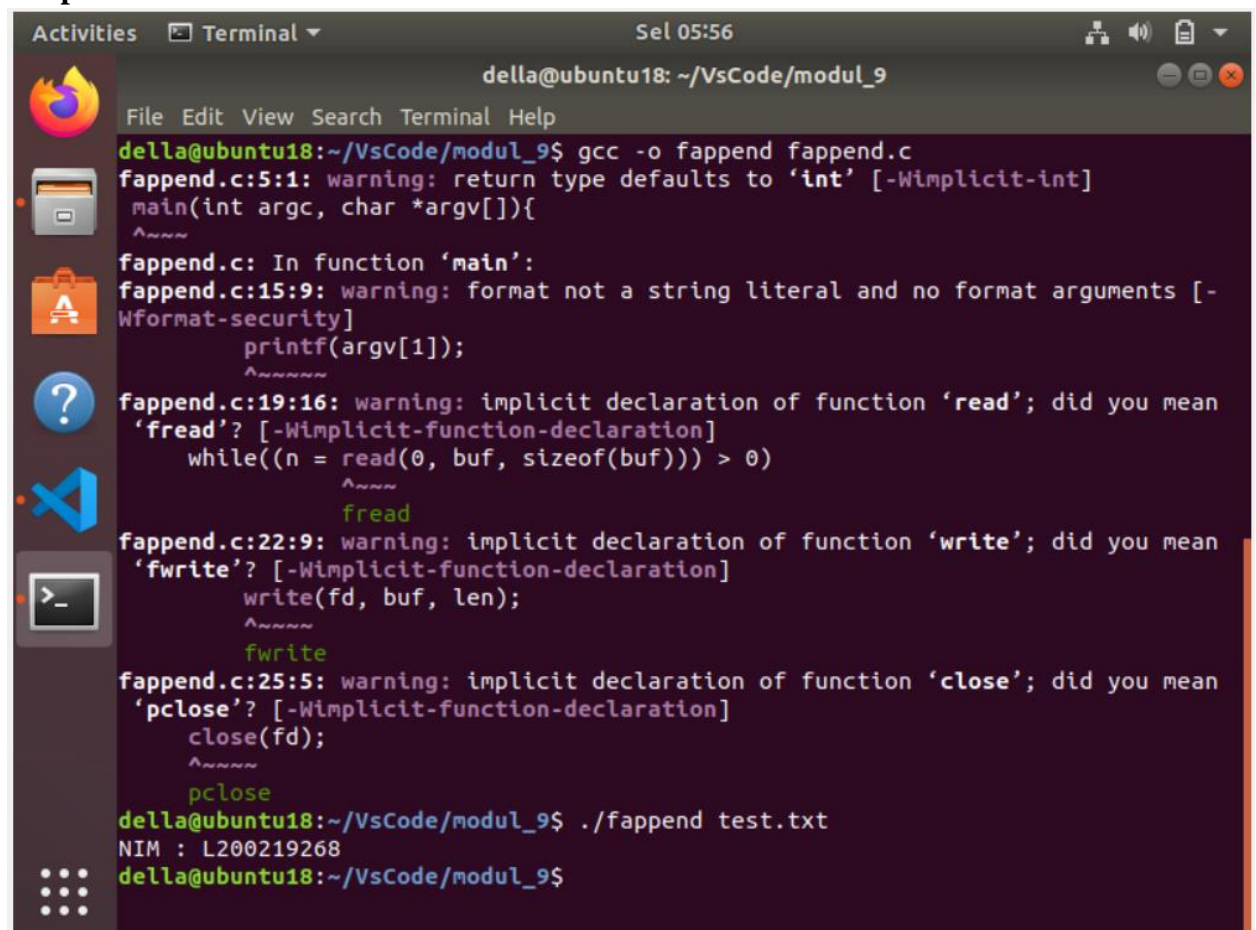
### 3. Menambah isi file

#### Kode Program :



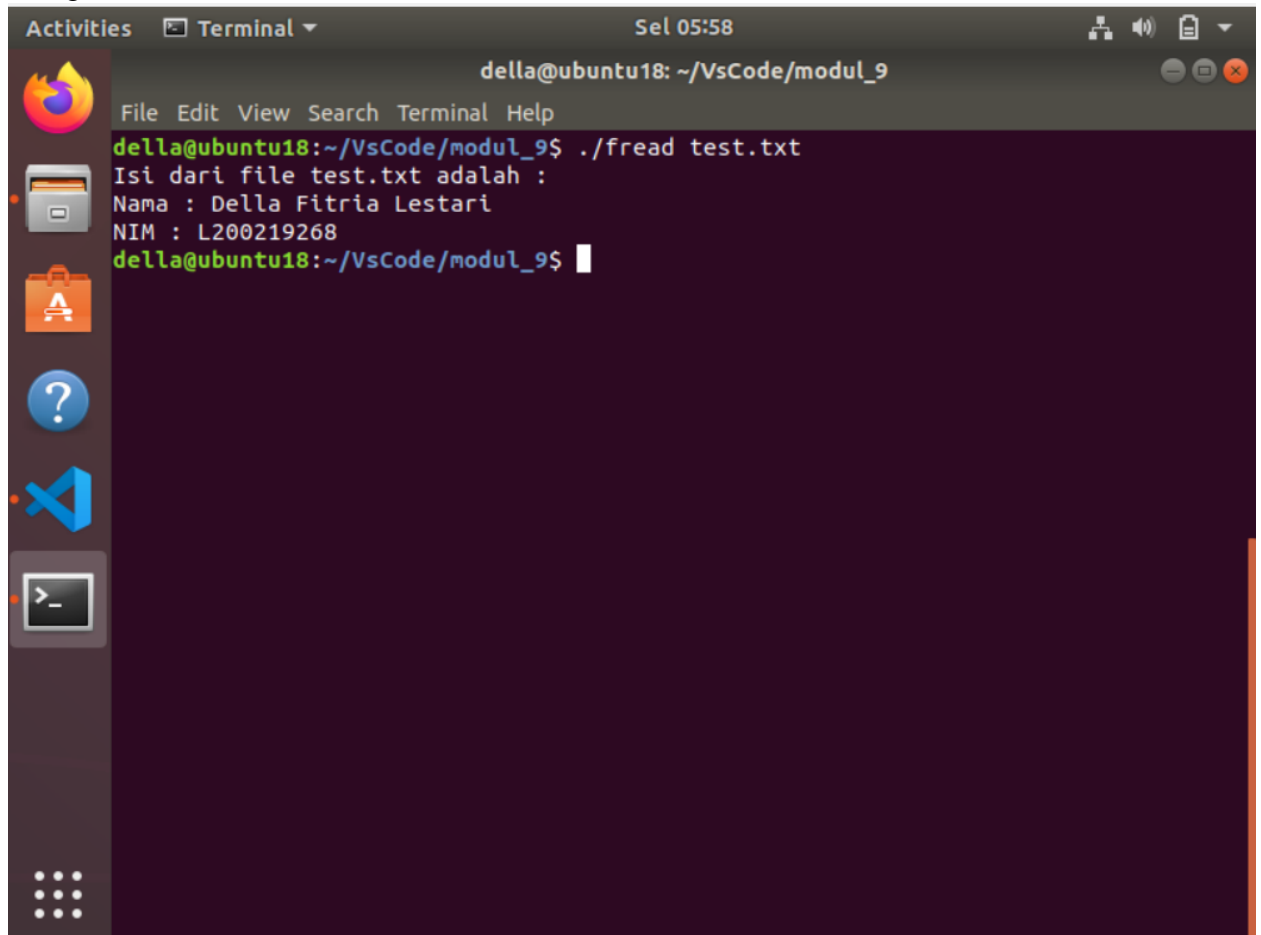
```
modul_9 > C fappend.c
1  #include <stdio.h>
2  #include <string.h>
3  #include <stdlib.h>
4  #include <fcntl.h>
5  main(int argc, char *argv[]){
6      int fd, n, len;
7      char buf[100];
8      if (argc != 2)
9      {
10         printf("Usage: ./a.out <filename>\n"); exit(-1);
11     }
12     fd = open(argv[1], O_APPEND|O_WRONLY|O_CREAT, 0644);
13     if(fd < 0)
14     {
15         printf(argv[1]);
16         exit(-1);
17     }
18
19     while((n = read(0, buf, sizeof(buf))) > 0)
20     {
21         len = strlen(buf);
22         write(fd, buf, len);
23     }
24
25     close(fd);
26 }
```

#### Output :



```
della@ubuntu18: ~/VsCode/modul_9
File Edit View Search Terminal Help
della@ubuntu18:~/VsCode/modul_9$ gcc -o fappend fappend.c
fappend.c:5:1: warning: return type defaults to 'int' [-Wimplicit-int]
main(int argc, char *argv[]){
~~~~~
fappend.c: In function 'main':
fappend.c:15:9: warning: format not a string literal and no format arguments [-Wformat-security]
printf(argv[1]);
~~~~~
fappend.c:19:16: warning: implicit declaration of function 'read'; did you mean
'fread'? [-Wimplicit-function-declaration]
while((n = read(0, buf, sizeof(buf))) > 0)
~~~~~
fread
fappend.c:22:9: warning: implicit declaration of function 'write'; did you mean
'fwrite'? [-Wimplicit-function-declaration]
write(fd, buf, len);
~~~~~
fwrite
fappend.c:25:5: warning: implicit declaration of function 'close'; did you mean
'pclose'? [-Wimplicit-function-declaration]
close(fd);
~~~~~
pclose
della@ubuntu18:~/VsCode/modul_9$ ./fappend test.txt
NIM : L200219268
della@ubuntu18:~/VsCode/modul_9$
```

Mengecek isi file test.txt untuk memastikan telah menambah isi file:



```
Activities Terminal Sel 05:58
della@ubuntu18: ~/VsCode/modul_9
File Edit View Search Terminal Help
della@ubuntu18:~/VsCode/modul_9$ ./fread test.txt
Isi dari file test.txt adalah :
Nama : Della Fitria Lestari
NIM : L200219268
della@ubuntu18:~/VsCode/modul_9$
```