PRAKTIKUM SISTEM OPERASI MODUL 9

Disusun oleh :

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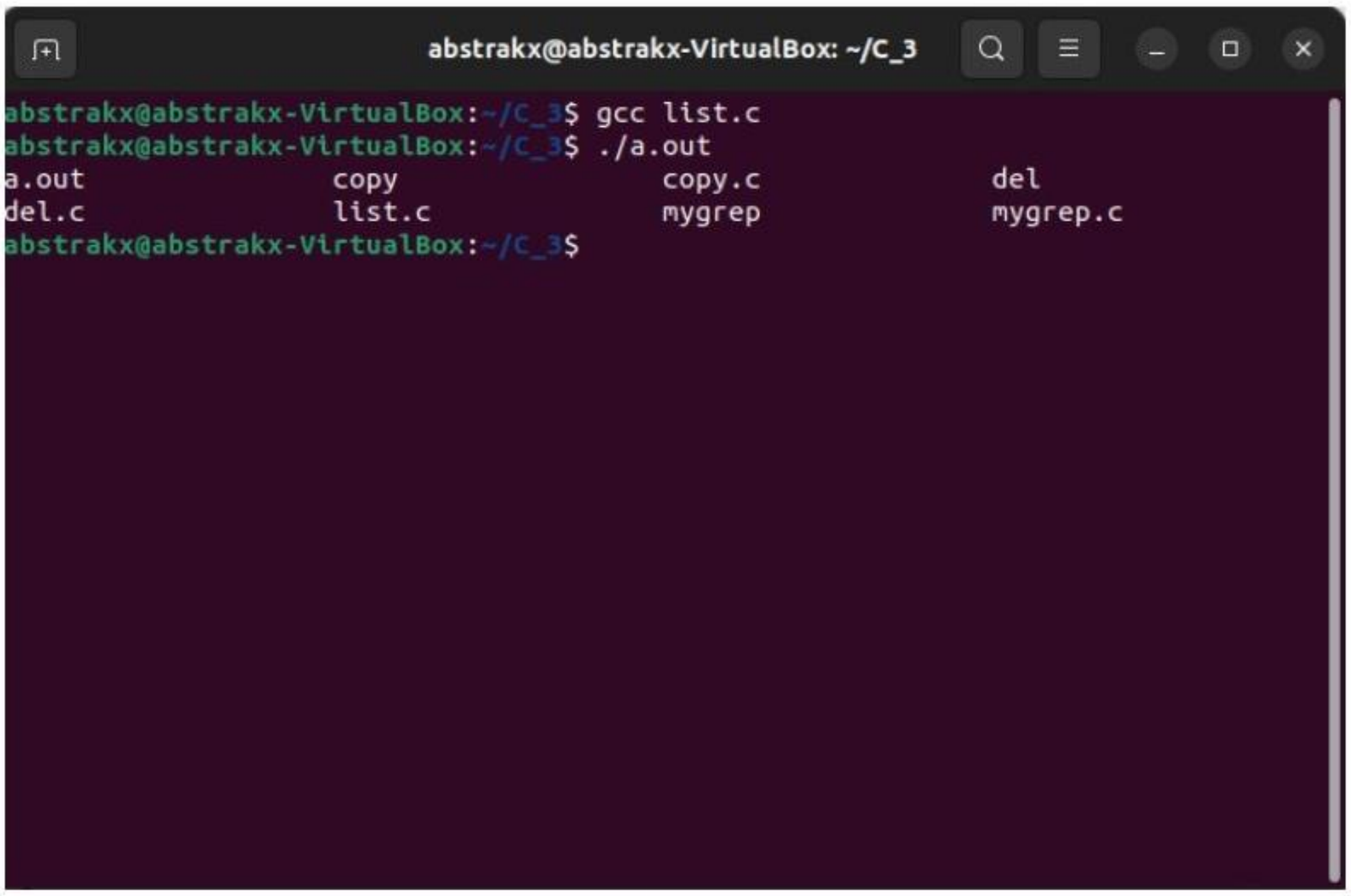
PROGRAM STUDI TEKNIK INFROMATIKA
FAKULTAS KOMUNIKASI DAN INFORMATIKA

UNIVERSITAS MUHAMMADIYAH SURAKARTA TAHUN 2022/2023

Open | list.c ~/C_3 | Save

```c
#include <stdio.h>
#include <unistd.h>
#include <dirent.h>

int main()
    struct dirent
    **namelist;
    int n,i;
    char pathname[100];
    getcwd(pathname, sizeof(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);
           }
        }
    }
```

C | Tab Width: 8 | Ln 29, Col 2 | INS



2. ***Berikut adalah kegiatan 2 yaitu program untuk mensimulasi perintah 'grep***

   a. Screenshot kode program mygrep.c

Open mygrep.c ~/C_3 Save

test.txt mygrep.c

```c
#include <stdio.h>
#include <string.h>
#include <stdlib.h>

int 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)
                {
                        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++)
                {
```

C Tab Width: 8 Ln 56, Col 2 INS

Open | mygrep.c ~/C_3 | Save

test.txt | mygrep.c

```c
        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)
                {
                        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;
                        }
                }
        }
```

C | Tab Width: 8 | Ln 56, Col 2 | INS

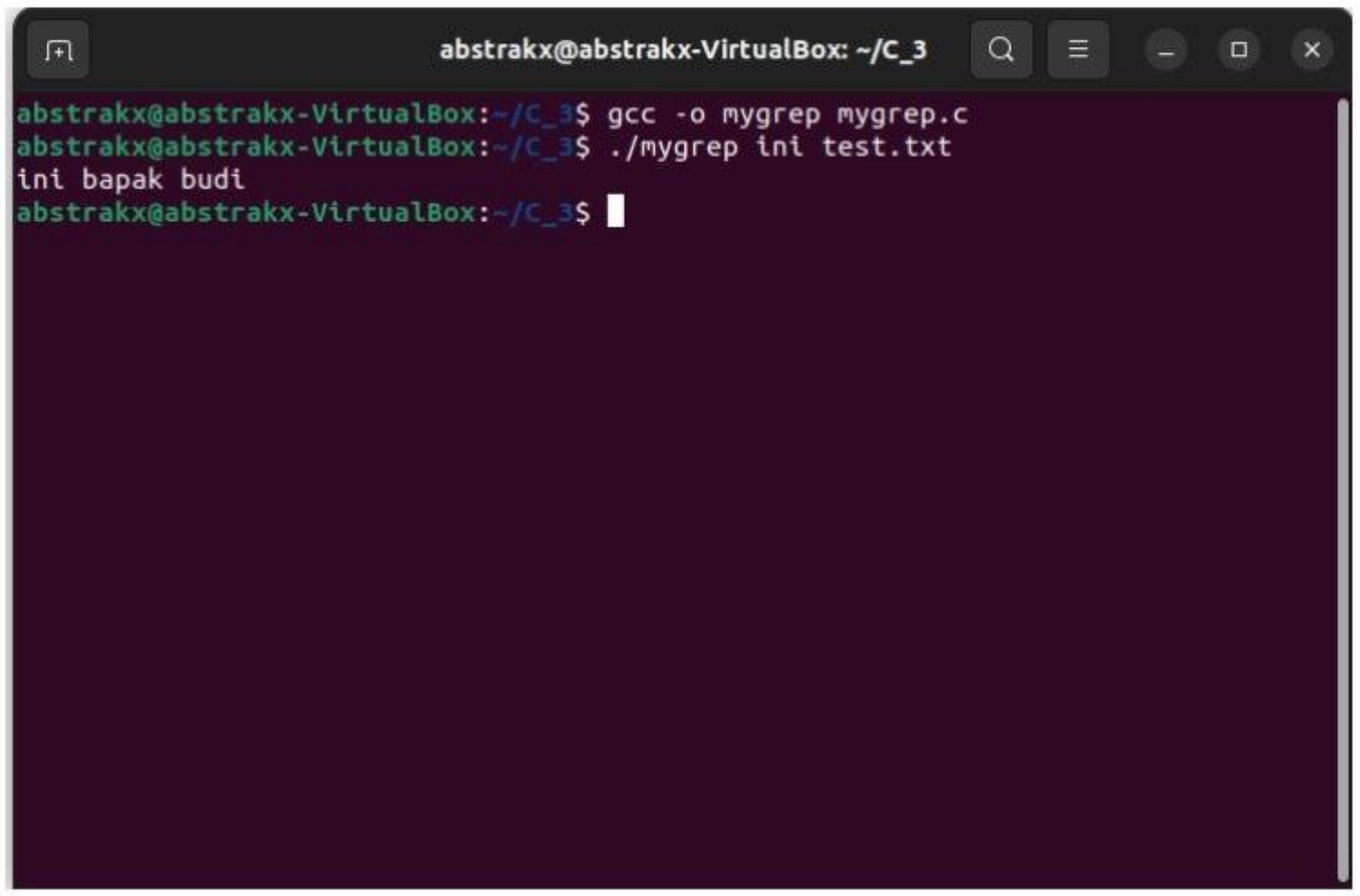
b. Screenshot dari isi teks test.txt

Open | test.txt ~/C_3 | Save

```
1 ini bapak budi
2 aku bukan bapak budi
```

Plain Text | Tab Width: 8 | Ln 2, Col 21 | INS

c. Screenshot hasil program ketika dijalankan



3. ***Berikut adalah kegiatan 3 yaitu program untuk mensimulasi perintah 'cp'.***

   a. Screenshot program copy.c

Open copy.c ~/C_3 Save

```c
#include <stdio.h>
#include <stdlib.h>
#include <fcntl.h>
#include <sys/stat.h>
#include <unistd.h>
#define SIZE 1024

int 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);
}
```

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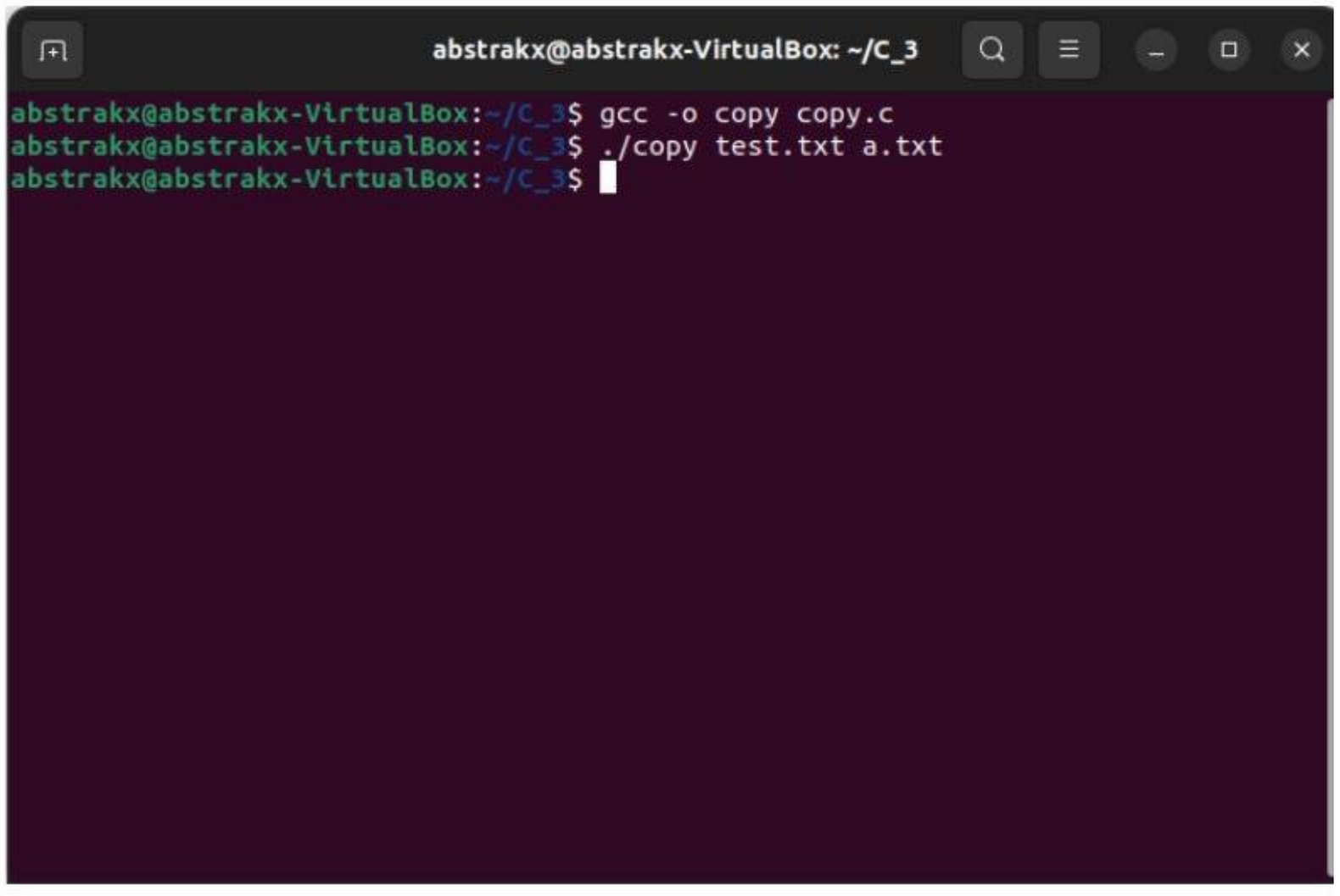
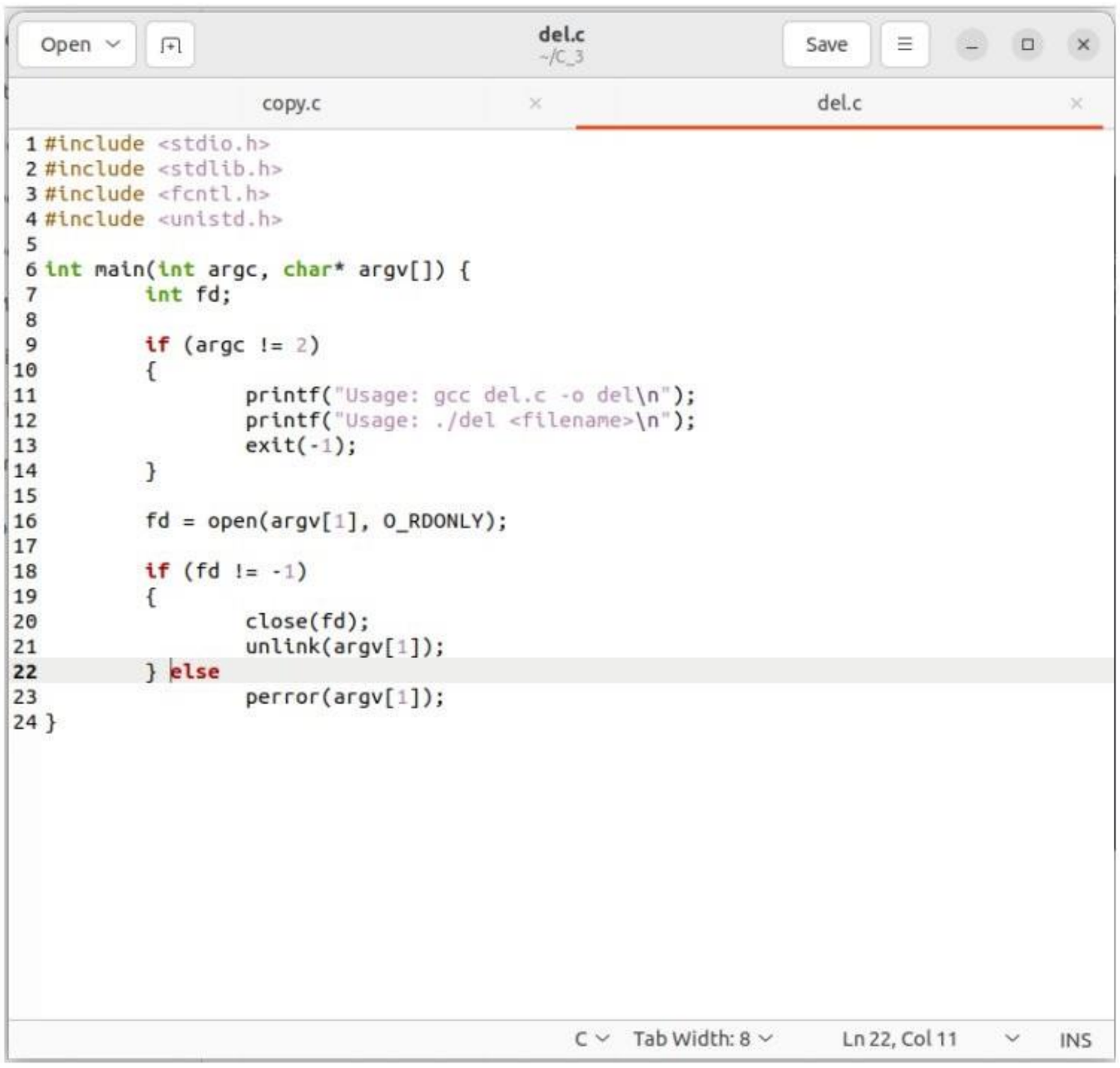
b. Screenshot hasil program ketika dijalankan



c. Hasil copy di direktori

4. ***Berikut adalah kegiatan 3 yaitu program untuk mensimulasi perintah 'rm'***

a. Screenshot kode program del.c



b. Screenshot hasil program ketika dijalankan