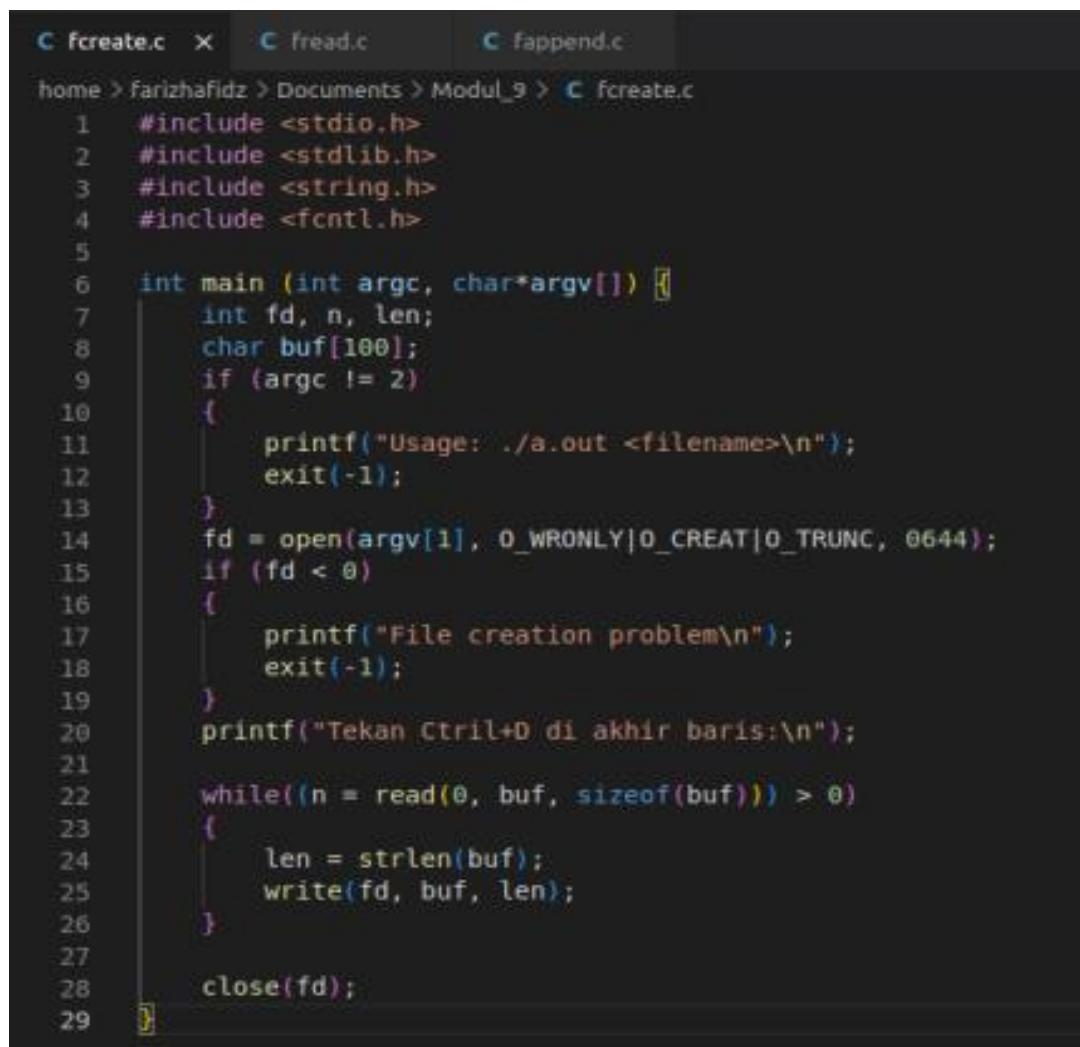**PRAKTIKUM SISTEM OPERASI**

DISUSUN OLEH :

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PROGRAM STUDI TEKNIK INFORMATIKA

FAKULTAS KOMUNIKASI DAN INFORMATIKA

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A. Membuat sebuah file dan menuliskan data di dalamnya.

Kode Program 'fcreate.c'

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

int main (int argc, char*argv[]) {
    int fd, n, len;
    char buf[100];
    if (argc != 2)
    {
        printf("Usage: ./a.out <filename>\n");
        exit(-1);
    }
    fd = open(argv[1], O_WRONLY|O_CREAT|O_TRUNC, 0644);
    if (fd < 0)
    {
        printf("File creation problem\n");
        exit(-1);
    }
    printf("Tekan Ctril+D di akhir baris:\n");

    while((n = read(0, buf, sizeof(buf))) > 0)
    {
        len = strlen(buf);
        write(fd, buf, len);
    }

    close(fd);
}
```

Terminal Kompiler gcc

```
farizhafidz@farizhafidz-VirtualBox:~/Documents/Modul_9$ gcc -o fcreate fcreate.c
fcreate.c: In function 'main':
fcreate.c:22:16: warning: implicit declaration of function 'read'; did you mean 'fread'? [-Wimplicit-function-declaration]
   22 |        while((n = read(0, buf, sizeof(buf))) > 0)
      |                   ^~~~
      |                   fread
fcreate.c:25:9: warning: implicit declaration of function 'write'; did you mean 'fwrite'? [-Wimplicit-function-declaration]
   25 |        write(fd, buf, len);
      |        ^~~~~
      |        fwrite
fcreate.c:28:5: warning: implicit declaration of function 'close'; did you mean 'pclose'? [-Wimplicit-function-declaration]
   28 |        close(fd);
      |        ^~~~~
      |        pclose
farizhafidz@farizhafidz-VirtualBox:~/Documents/Modul_9$ ./fcreate test.txt
Tekan Ctril+D di akhir baris:
Halo Gaess David Disini^C
farizhafidz@farizhafidz-VirtualBox:~/Documents/Modul_9$
```

B. Membaca sebuah file dalam menampilkan isinya di layar.

Kode Program 'fread.c'

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

int main (int argc, char*argv[]) {
    int fd, i;
    char buf[100];
    if (argc < 2)
    {
        printf("Usage: ./a.out <filename>\n");
        exit(-1);
    }

    fd = open(argv[1], O_RDONLY);
    if(fd == -1)
    {
        printf("%s file does not exist\n", argv[1]);
        exit(-1);
    }

    printf("Isi dari file %s adalah : \n", argv[1]);
    while(read(fd, buf, sizeof(buf)) > 0)
        printf("%s", buf);

    close(fd);

}
```

Terminal Kompiler gcc

```
farizhafidz@farizhafidz-VirtualBox:~/Documents/Modul_9$ gcc fread.c
fread.c: In function 'main':
fread.c:22:11: warning: implicit declaration of function 'read'; did you mean 'fread'? [-Wimplicit-function-declaration]
   22 |     while(read(fd, buf, sizeof(buf)) > 0)
      |           ^~~~
      |           fread
fread.c:25:5: warning: implicit declaration of function 'close'; did you mean 'pclose'? [-Wimplicit-function-declaration]
   25 |     close(fd);
      |     ^~~~~
      |     pclose
farizhafidz@farizhafidz-VirtualBox:~/Documents/Modul_9$ ./a.out test.txt
Isi dari file test.txt adalah :
Halo Gaess David Disinifarizhafidz@farizhafidz-VirtualBox:~/Documents/Modul_9$
```

C. Menambah isi file.

Kode Program 'fappend.c'

```c
#include <stdio.h>
#include <string.h>
#include <stdlib.h>
#include <fcntl.h>
int main (int argc, char *argv[]) {
    int fd, n, len;
    char buf[100];
    if (argc != 2)
    {
        printf("Usage: ./a.out <filename>\n");
        exit(-1);
    }
    fd = open(argv[1], O_WRONLY|O_CREAT|O_TRUNC, 0644);
    if (fd < 0)
    {
        perror(argv[1]);
        exit(-1);
    }

    while((n = read(0, buf, sizeof(buf))) > 0)
    {
        len = strlen(buf);
        write(fd, buf, len);
    }

    close(fd);
}
```

Terminal Kompiler gcc

```
farizhafidz@farizhafidz-VirtualBox:~/Documents/Modul_9$ gcc fappend.c
fappend.c: In function 'main':
fappend.c:20:16: warning: implicit declaration of function 'read'; did you mean 'fread'? [-Wimplicit-function-declaration]
   20 |     while((n = read(0, buf, sizeof(buf))) > 0)
      |                ^~~~
      |                fread
fappend.c:23:9: warning: implicit declaration of function 'write'; did you mean 'fwrite'? [-Wimplicit-function-declaration]
   23 |         write(fd, buf, len);
      |         ^~~~~
      |         fwrite
fappend.c:26:5: warning: implicit declaration of function 'close'; did you mean 'pclose'? [-Wimplicit-function-declaration]
   26 |     close(fd);
      |     ^~~~~
      |     pclose
farizhafidz@farizhafidz-VirtualBox:~/Documents/Modul_9$ ./a.out test.txt
Halo Gaess kembali lagi bersama saya David di channel Gadgetin^C
farizhafidz@farizhafidz-VirtualBox:~/Documents/Modul_9$
```

```
farizhafidz@farizhafidz-VirtualBox:~/Documents/Modul_9$ gcc fread.c
fread.c: In function 'main':
fread.c:22:11: warning: implicit declaration of function 'read'; did you mean 'fread'? [-Wimplicit-function-declaration]
   22 |     while(read(fd, buf, sizeof(buf)) > 0)
      |           ^~~~
      |           fread
fread.c:25:5: warning: implicit declaration of function 'close'; did you mean 'pclose'? [-Wimplicit-function-declaration]
   25 |     close(fd);
      |     ^~~~~
      |     pclose
farizhafidz@farizhafidz-VirtualBox:~/Documents/Modul_9$ ./a.out test.txt
Isi dari file test.txt adalah :
Halo Gaess kembali lagi bersama saya David di Channel Gadgetinfarizhafidz@farizhafidz-VirtualBox:~/Documents/Modul_9$
```